



# AIR AMBULANCE STUDY

## REQUIRED UNDER SENATE BILL 770

MARYLAND HEALTH CARE COMMISSION  
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# About MHCC

The Maryland Health Care Commission (MHCC) is an independent state regulatory agency whose mission is to plan for health system needs, promote informed decision-making, increase accountability, and improve access in a rapidly changing health care environment by providing timely and accurate information on availability, cost, and quality of services to policy makers, purchasers, providers and the public. The Commission's vision for Maryland is to ensure that informed consumers hold the health care system accountable and have access to affordable and appropriate health care services through programs that serve as models for the nation.

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# Executive Summary

The General Assembly, under Senate Bill 770 (Air Ambulance Study), directed the Maryland Health Care Commission (MHCC), in consultation with the Maryland Institute for Emergency Medical Services System (MIEMSS) and the Health Services Cost Review Commission (HSCRC), and with the assistance of the Office of the Attorney General, to examine the costs and reimbursement for air ambulance services provided by air ambulance companies. The legislation also directed MHCC to identify options for regulating ambulance services to ensure cost-effective use of air ambulance services.

## POLICY CONTEXT FOR THE STUDY

Approximately 11,000 patients are transported by air ambulance each year in Maryland. The Maryland State Police (MSP) Aviation Command transports approximately 5,000 patients from primary scenes to trauma centers in Maryland. Private air ambulance companies complete approximately 6,000 missions between hospitals (inter-hospital) annually. These companies include MedSTAR Transport, a unit of the MedSTAR Health System; STAT MedEvac, a provider formed through a consortium of southwestern Pennsylvania hospitals; and two publicly traded companies (PHI and Air Methods). Network participation (contracting) policies vary among the major air ambulance companies due to differing cost structures and business models. Although a patient plays no role in selecting the air ambulance company, the patient may be responsible for a sizeable bill depending on the payor insuring the patient and air ambulance company flying the mission.

## THE IMPACT OF MARYLAND AND FEDERAL LAW ON THE PROVISION OF AIR AMBULANCE SERVICE

A jumble of Federal and State laws limit the development of new regulatory solutions. The Federal Airline Deregulation Act (ADA) of 1978 prohibits states from regulating rates, routes, and services of air ambulance companies by preempting State laws and regulations which attempt to control those areas. The ADA preemption thus imposes a broad preclusion on the direct regulation of air ambulance services by states. Indirectly regulating air ambulance companies by requiring payors to reimburse at specified levels is similarly limited due to the Federal Employee Retirement Income Security Act (ERISA) preemptions that prevent states from regulating self-insured employers.

The requirement to offer ambulance services in health benefit contracts varies under State law by market and delivery system (Health Maintenance Organization (HMO) or Preferred Provider Organization (PPO)). Ambulance service, including air ambulance transport, is a covered benefit in the Comprehensive Standard Health Benefit Plan (CSHBP, small group), but is not a mandatory benefit in the individual or large group markets. HMOs tend to provide coverage, regardless of the market segment, although they are required to offer coverage only under contracts written for the CSHBP. PPOs and other types of insurance have flexibility, outside of the small group, to limit the benefit to ground only, cap the amount paid on air ambulance services, or not cover the benefit at all. The variability in State law sends inconsistent signals to payors who are required to offer the benefit in one market, but not others. If the General Assembly wishes to ensure consistent coverage for the benefit, a necessary first step would be to require a standard air ambulance benefit under all insurance contracts.

## **AIR AMBULANCE SERVICES IN MARYLAND**

Air ambulance companies respond to physicians requesting transport for patients in their care, and work under contract to hospitals for patients that are transferred to the facilities. Nationwide, internal hospital ownership of air transport programs is on the decline. Standalone air ambulance companies that operate under contract to hospitals or serve providers through community-based programs are becoming the dominant operating model. Between 2005 and 2006, two new standalone air ambulance companies entered the Maryland market. One of the companies established a contract with the University of Maryland Medical System. Contracting allows hospitals to shift a significant portion of the costs for the inter-hospital transport program to the company. Air transport companies often provide benefits that are equivalent to ownership for hospitals, including first-right to the vehicle, and branding the hospital name, logo, and colors on the helicopter.

The entry of the new air transport providers indicates the air transport market in the State is robust. There are now 11 commercial aircraft based in the State or in nearby jurisdictions that are dedicated to inter-hospital transport. Twelve MSP helicopters are dedicated to responding to MSP's varied responsibilities, the most prevalent of which is the medevac mission. As with all helicopter services, however, some MSP helicopters may be undergoing repair or in maintenance at any time. At least eight are operational at any given time. Almost all Maryland residents have access to easily deployable transport within the recommended timeframes.

Network participation with payors is on the decline. The percent of inter-hospital transfers completed under in-network arrangements declined from 47 percent in 2004 to

27 percent in 2005. Aviation-based air ambulance companies seldom contract with insurers, but hospital-owned programs contract more frequently as negotiations regarding air transport are commonly embedded within broader agreements covering other services provided at a hospital.

## **COVERAGE OF AIR AMBULANCE SERVICES BY PAYORS**

Average private payor in-network (contracting) payments per mission are slightly higher than average out-of-network payments per mission. Payors set in-network payments higher than out-of-network payments to encourage network participation (contracting) in their networks. When ambulance companies do not contract, they bill the patient for the difference between the billed charge and the payor reimbursed amount. This study found the difference between the payor's average reimbursement and the average provider billed charge is \$2,889. Charity care or bad debt write-off account for a significant share of collectibles. Air ambulance companies claim that they do not collect anything close to \$2,889 on average from patients. In 2005, the four largest firms wrote off almost \$2.2 million in costs on about \$18 million in revenue. Uncompensated care costs account for about 12 percent of gross revenue.<sup>1</sup> Approximately 10 percent of missions are defined as charity care, or written off as uncollectible in part or in whole.

Current in-network payments appear to cover the costs of reasonably efficient air ambulance companies. Using limited cost data provided by the air ambulance companies, MHCC estimates that air ambulance companies would achieve a gross operating margin of about 11.5 percent if all services were contracted at the average allowed rates available in Maryland. These estimates should be interpreted cautiously as sizeable air ambulance company capital expenses associated with air ambulance acquisition and leasing may not be uniformly accounted for in the cost data.

Significant variation exists in in-network reimbursement rates. Some payors appear to reimburse using the lower urban rate from the Medicare Ambulance Fee Schedule for all urban and rural jurisdictions in Maryland. Private ambulance services are reimbursed (including the payor and patient payments) about 113 percent of Medicare fees under existing contracting agreements with private payors. The total payment, including payor and patient portions, is 130 percent of the Medicare fee, if the payor is non-contracting. When the balance between the provider's billed charges and the payor's allowed fee is included (balance bill), total payment is 180 percent of the Medicare Fee. It should be emphasized that MHCC assumes that the complete balance bill is recovered at the 180 percent of Medicare fee level.

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<sup>1</sup> Cost and revenue data are not audited and were obtained from companies via a short survey.

Air ambulance fees paid by private payors are on average slightly higher than typical health professional reimbursement relative to Medicare fees. Recent studies of physician fees pegged reimbursement in Maryland at about 100 percent of Medicare.<sup>2</sup> Payors offer contracting rates that are about 13 percent above Medicare fees, but rarely match the most favorable Medicare fee for rural areas across the entire book of air ambulance business. About 5 percent of Medicare missions are reimbursed at the rural rate, which is 150 percent of the urban Medicare fee. Some air ambulance companies argue that the rural Medicare rate is necessary to guarantee network participation. Data available to MHCC shows that most private payors do not pay Medicare rural fees for network air transport. This impasse on reimbursement keeps network participation low.

## **OPTIONS FOR AIR AMBULANCE SERVICES**

The MHCC developed various options for reducing patient out-of-pocket payments. Three options offer regulatory solutions to the problem of large patient out-of-pocket payments. Option 1 establishes a rate-setting process for air ambulance services within HSCRC. Option 2 adds air ambulance services to services covered under recently enacted network adequacy legislation. Option 3 sets a voluntary floor on payments that an air ambulance company could receive from private payors, if the company waives balance bill privileges. All three options are administratively complex given the size of the service, could conflict with the Federal ADA, and are too prescriptive for an evolving service. The air ambulance industry, hospitals, and payers oppose all of these options.

Two other options generated more interest on the part of stakeholders, do not conflict with Federal law, and require limited changes to Maryland law. The first of these, Option 4, recommends that MHCC publish information on the costs of air ambulance services, contracting arrangements, and quality information. Air ambulance company representatives suggest that publishing information on cost variation will have limited benefit because patients rarely can predict the need for air ambulance transport. Others note that information on price differences will benefit the industry and payors by helping reduce the nearly 100 percent variation in billed charges. The MHCC believes that information on the quality of service could be added. The MHCC and the other agencies believe existing hospital and HMO quality sites are the appropriate Internet sites for air ambulance cost data. Hospital representatives were not happy with this suggestion, arguing that placing ambulance information on the MHCC Hospital Quality Reporting site indicates hospitals are responsible for the service.

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<sup>2</sup> Maryland Health Care Commission (MHCC). *2004 Practitioner Reimbursement and Utilization*. Baltimore, MD: MHCC, April 2006.



Option 5 creates a complaint process within MIEMSS, the organization responsible for licensing air ambulance companies. Establishing a complaint process is generally supported by all stakeholders. Some observers argue that MIEMSS should serve as a point-of-entry for complaints, but the Maryland Insurance Administration or the Office of the Attorney General may be more appropriate for resolving insurance or legal questions. Some stakeholders feel increased price transparency for air ambulance services and a defined complaint process are reasonable steps.

## **CONCLUSION**

After the first meeting, and at the start of the last meeting with air ambulance companies, MHCC called on payors and air ambulance companies to renew their efforts to contract, which will reduce insured patients' out-of-pocket spending on air ambulance service. While some progress has been reported, more is needed. Payors and air ambulance companies appear interested in resolving the impasse. Hospitals also can play a role. During the negotiations to establish joint ventures, hospitals should review the air ambulance company's position on contracting with payors, use of balance billing when contracting is not possible, and program for providing charity care. The MHCC and other State agencies are available to provide additional information or support for any of the negotiations that take place.

# 1. Introduction

The Maryland Health Care Commission (MHCC) estimates that approximately 11,000 patients were transported by public or private air ambulance in Maryland during 2005. The Maryland Institute for Emergency Medical Services System (MIEMSS) estimates there were approximately 575,000 ambulance transports in 2005. Air ambulance missions, either from a primary scene or between hospitals, account for just over 1 percent of all transports. Although small in number, these flights are essential for critically injured and seriously ill patients. Survival may depend on easy access to air transport from the scene or between hospitals. About 25 percent of the most seriously injured trauma patients are transported from the scene by air transport.<sup>3</sup> Air ambulance services are expensive and coverage under insurance is uneven among payors. On a per trip basis, air medevac is expensive; a typical flight costs more than \$5,000.

In 2006, the Maryland General Assembly required MHCC, in consultation with MIEMSS and the Health Services Cost Review Commission (HSCRC), and with the assistance of the Office of the Attorney General, to study issues on air ambulance transport in the State, looking specifically at the following:

- 1) The financial aspects of inter-hospital patient transfer and scene transport by air ambulance services operating in Maryland, including:
  - the types and costs of operations;
  - charges for services provided, including billing practices; and
  - reimbursement by payors;
- 2) State and Federal laws applicable to the operation of air ambulance services in the State; and
- 3) Mechanisms available to the State to regulate financial aspects of air ambulance services and to ensure cost-effective use of air ambulance services for inter-hospital patient transfer and scene transport.

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<sup>3</sup> MHCC derived this estimate from MSP data showing the agency completed 5,000 scene transports in FY 2005 and MIEMSS data on trauma registry patients in 2004-2005 (19,322). Trauma registry data shows the MSP air ambulance share to be 21 percent; the differences may be attributable to reporting accuracy at some trauma centers.

## PROCESS FOR GATHERING INFORMATION

Air ambulance services are a small (approximately \$40 million) but important component of the \$30 billion spent for health care services in Maryland in 2005. Issues of network participation and balance billing of patients that are central issues to this study have surfaced in previous debates between providers and payors. Recognizing the importance of access to air ambulance services and the broader sweep of the network participation questions, MHCC undertook an extensive investigation of legal and economic issues related to the service. Staff from MHCC, in consultation with MIEMSS, HSCRC, and the Attorney General's office, met to discuss the framework of the study and identify possible policy options. Meetings were held with the major air commercial medevac providers<sup>4</sup>, as well as with the Maryland State Police (MSP), the major hospital systems, and leading payors serving Maryland residents. The MHCC requested that the major air ambulance companies provide information on costs, fees, reimbursement, and uncompensated care, which they agreed to provide. Air ambulance claims were extracted from MHCC's database of health claims and analyzed to determine how payment levels vary among payors. In September 2006, an initial public meeting was held with interested parties to discuss issues and possible options. A second meeting was held in December 2006 to discuss study conclusions and policy recommendations.

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<sup>4</sup> Air ambulance companies are commercial companies, unless otherwise noted in this study.

## 2. Policy Context for the Study

Passage of Senate Bill (SB) 770 by the General Assembly was sparked by a consumer complaint about a large bill from an air ambulance provider that did not participate in the health insurance company's provider network. When a patient is transported by an air ambulance company from a primary scene, such as an accident site, or between hospitals, the bill for the service ranges from \$4,000 to \$20,000. Even when insured, the patient may be liable for half or more of the billed charge, if the air ambulance provider does not participate (contract) in the insurer's provider network. On the other hand, co-payments and deductibles could amount to several hundred dollars if the patient is transported by an in-network participating air ambulance company. In Maryland, as in other parts of the country, air ambulance companies and insurance carriers have had difficulty reaching contracts due to the inability to agree on reimbursement rates. Without agreements, services are provided under out-of-network arrangements.<sup>5</sup> The core issue in the legislative debate prompting SB 770 was who should bear payment responsibility for the substantial air ambulance charge when the provider did not participate in an insurance carrier's network and the patient had no ability to choose the provider (due to the emergency nature of the situation). Of the air ambulance companies serving the Maryland market as of September 2006, only one company routinely contracts with insurance companies. Depending on the air ambulance company used, a patient could face a modest co-payment or a significant balance bill.

In conducting this study, MHCC examined the costs and reimbursements for air ambulance services. Air ambulance companies argue that some private payer in-network reimbursement rates are inadequate to cover their costs. Unable to survive on in-network payments, they must collect the out-of-network insurance rate from the patient's insurer and balance bill the patient to fully cover the costs of operation. To complete this study, MHCC examined the costs and reimbursements for air ambulance service. A complete discussion of the adequacy of air ambulance rates inherently involves asking whether the profit generated by those rates are high enough to attract and retain air ambulance companies interested in providing the service. A full assessment of this question is complex and beyond the scope of this study. It is, however, possible to determine air ambulance companies' willingness to transport patients, whether providing the service is attracting new competition to the Maryland market, whether the supply of air ambulance aircraft appears to be keeping pace with the demand for transport, and, finally, whether fee increases are above or below changes in

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<sup>5</sup> Some air ambulance companies and payors will enter into a single patient agreement that makes a single trip "in-network."

practice costs. These factors can then be used to draw a quantitative conclusion as to the adequacy of payment and whether out-of-network contracting may be necessary from a cost standpoint.

# 3. The Impact of Maryland and Federal Law on the Provision of Air Ambulance Service

## RELEVANT FEDERAL LAW

Any discussion of the impact of Federal laws on the provision of air ambulance services in the State must begin with the Airline Deregulation Act (ADA) of 1978, a Federal statute designed to remove government control from commercial aviation and expose the passenger airline industry to market forces. Whereas prior to 1978, domestic air transport had been regulated as a public utility by the Federal Civil Aeronautics Board, the rigidity of the system, coupled with ever escalating customer fares, increasing subsidies paid by outlying communities, and the bankruptcy of the railroad industry caused Congress to become concerned. The result was the ADA which sought to gradually remove all government control over a 4-year period with the complete elimination of restrictions by January of 1983. The ADA provides that maximum reliance should be placed on “competitive market forces” to further “efficiency, innovation, and low prices” as well as “variety and quality . . . of air transportation services. . . .”<sup>6</sup> “To ensure that the states would not undo Federal deregulation with regulation of their own, the ADA included a preemption provision, prohibiting the State from enforcing any law ‘relating to rates, routes or services’ of any air carrier. §1305(a)(1).”<sup>7</sup>

This prohibition was given an extremely broad reading by the Supreme Court in *Morales v. Trans World Airlines, Inc., et al.*, 112 S.Ct. 2031 (1992), which interpreted the prohibition to proscribe any State law “having a connection with or reference to airlines rates, routes or services.”<sup>8</sup>

States have moved cautiously since the enactment of the ADA in claiming authority over any aspect of aviation regulation including the regulation of air ambulance service. In 1987, the Attorney General of Arizona concluded that the provisions of the ADA precluded that state from asserting Certificate of Need (CON) regulation of air

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<sup>6</sup> *Morales v. Trans World Airlines, Inc., et al.*, 112 S.Ct. 2031, 2034 (1992).

<sup>7</sup> *Ibid.*

<sup>8</sup> *Ibid* at 2037 (emphasis added).

ambulance services, but permitted the state to regulate such flights with regard to essential public health and safety matters. In 2006, the Attorney General of Hawaii issued an opinion to the Hawaii State Health Planning and Development Agency and the Department of Health advising that the state cannot require a CON for air ambulances to operate in Hawaii. The ruling resulted from a Federal Aviation Administration (FAA) advisory to the state stating that it could not regulate air carriers; even those involved in a specialized service that otherwise would be regulated at the state level. States still require an air ambulance operator to be licensed as a medical services provider but licensing requirements can apply only to the quality of medical services, including standards for staffing and equipment required for an ambulance service.

Another Federal statute that indirectly impacts a state's (including Maryland's) provision of air ambulance services is the Federal Employee Retirement Income Security Act (ERISA) which exempts self-insured companies or entities from State insurance laws. This statute has an effect similar to the ADA in that self-insured entities may ignore any State-imposed insurance coverage mandates, required reimbursement floors for specific services, e.g., coverage requirements for out-of-network service providers, as well as any other insurance requirement that a state enacts. Employers that self-insure their employees' health cannot be compelled to offer a benefit (i.e., air ambulance service) under State law. The preemption applies regardless of whether an employer self-administers the insurance benefits or pays an insurance company "administrative services only" to administer the benefit on behalf of the employer.

A third Federal enactment which impinges on certain aspects of emergency air ambulance transport is the Emergency Medical Treatment and Active Labor Act (EMTALA) which was passed in 1986 to combat the discriminatory practice by certain hospitals in transferring, discharging, or refusing to treat uninsured indigent patients at the hospital's emergency department because of the high cost associated with diagnosing and treating emergency medical conditions in these patients.<sup>9</sup> EMTALA applies to all hospitals that participate in Medicare, thus protecting persons coming to a hospital seeking emergency medical services. EMTALA imposes strict penalties including fines and exclusion from the Medicare program for violations of the Act. The Act imposes three primary requirements on hospitals that provide emergency medical services:

- the hospital must provide an appropriate medical screening exam to anyone coming to the emergency department seeking medical care;

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<sup>9</sup> U. S. Code Title 42 Chapter 7 Subchapter XVIII - Health Insurance for Aged and Disabled, Part E §1395dd. Examination and treatment for emergency medical conditions and women in labor.

- the hospital must treat and stabilize a patient that comes to the hospital with an emergency medical condition, or the hospital must transfer the individual; and
- the hospital must not transfer an individual with an emergency medical condition that has not been stabilized unless several conditions are met including arranging an appropriate transfer.

The last requirement directly impacts air ambulance transport from the sending hospital. While the receiving hospital determines which air ambulance company to use, the sending hospital must confirm that appropriate transportation has been arranged for the patient. Although EMTALA does not impact the application of State law, it ties the sending hospital to the transfer. Until an attending physician at the receiving hospital accepts the patient, the sending hospital is responsible for care, including the air transport component.

Last, but definitely not least, Federal Medicare and Medicaid provisions have definite implications for the provision of air ambulance services for patients covered by these programs. Medicare has developed extensive rules for appropriate use of ambulance services, including air ambulance services. Medicare pays for use of air ambulance services when medically necessary, time is essential, and/or other modes of transport are not available or not appropriate. Transport is only provided to the nearest hospital offering the treatment needed by the patient. Since 2002, air ambulance services have been reimbursed in part on the Medicare Ambulance Fee Schedule. That payment system is discussed in greater detail in Chapter 5. Under Medicaid, the state defines a system for the delivery of air ambulance services, but the Centers for Medicare and Medicaid Services (CMS) must approve the process before implementation.

## **RELEVANT PROVISIONS IN MARYLAND LAW**

Maryland has enacted many statutes requiring that all Maryland insurance companies offer a specific type of health insurance benefit, collectively referred to as “mandated benefits,” to any citizen who purchases a health insurance policy sold in the State. These laws were enacted to ensure that insurers did not “skirt” the need to provide coverage for specific serious and/or commonly ignored but important health care necessities such as hospitalization for women and newborns after childbirth, outpatient mental health services, and various diagnostic screenings for breast, colon, and prostate cancer, among other requirements.<sup>10</sup>

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<sup>10</sup> See Insurance Article, §15.801–15.841 for the complete list of required health insurance benefits.



The inclusion of emergency ambulance services in insurance products offered in Maryland varies (Table 3-1). Although not specifically referred to in regulations, air ambulance transport services would appear to be included in the Comprehensive Standard Health Benefit Plan (CSHBP)<sup>11</sup> product, but such services are not a “mandated benefit” and, therefore, not required in either large group or individual products sold in Maryland.<sup>12</sup> For the latter two products, the plan sponsor (employer) and the payor have flexibility to define the scope of any ambulance benefit, if offered at all. Some such contracts cover ground ambulance only, others cover ground ambulance and cap air ambulance services at a relatively low threshold — perhaps \$250 — and still others treat all ambulance services as a covered service subject to the same rules and conditions as any other covered benefit.

Health Maintenance Organizations (HMOs) typically cover air ambulance services based on their interpretation of the Maryland HMO statute even though the service is not a required medical service under the Health General Article.<sup>13</sup> HMOs rely on Federal law which broadly defines emergency services that must be offered to qualify as a federally qualified HMO.<sup>14</sup>

**Table 3-1: Coverage of Ambulance Service Under Maryland Law**

| Delivery System   | Individual Market   | Small Group                            | Large Group   |
|-------------------|---|--|---|
| HMO/HMO POS       | Ambulance service defined as a health service, subject to medical necessity | Required, subject to medical necessity | Ambulance defined as a health service, subject to medical necessity |
| PPO and Indemnity | Not required  | Required, subject to medical necessity | Not required  |

Given that air ambulance service is not a mandated benefit, the State has limited ability to control the conditions under which the benefit can be offered. If rigid conditions are established by the State, the plan sponsor can decide to simply drop the benefit under the contract. Given that air ambulance service is not a required covered service, except in the small group market, debates on how the service is offered and the amount a

<sup>11</sup> Maryland’s Comprehensive Standard Health Benefit Plan and the Limited Benefit Plan are State legislated insurance plans designed to provide a standard set of health insurance benefits to the employees of “small employers” (1–50 employees).

<sup>12</sup> “Mandated benefits” include, among others, access to inpatient childbirth and newborn care, mental health services, and routine screening for breast, colon, and prostate cancer.

<sup>13</sup> Health-General §19-706. Regulation; applicability of other laws (applies required health benefits defined in the Insurance article to HMOs).

<sup>14</sup> U.S. Code Title 42 Chapter 6a Subchapter XI - Health Maintenance Organizations, §300e. Requirements of health maintenance organizations.

carrier should pay are constrained. It is difficult to define an appropriate payment level when the service is mandated; setting a fee when a service is not required under State law is even more difficult because payors can avoid, in their view, an unacceptably high payment by dropping the service from the benefit package.

In recent years, debate over who pays the difference between what the health insurer pays and what the provider charges in regard to customarily available health care services has been common in the General Assembly. Balance billing of an HMO enrollee for a covered service has been prohibited under Maryland law, HG §19-710 since the late 1980s.<sup>15</sup> In-network providers of covered services must accept the rate they negotiated with the HMO as payment in full. (See 89 OAG 53 (2004).) Out-of-network providers must accept an amount defined in statute HG §19-710.1 (125% of the rate the HMO pays its providers in the same geographic area), or agreed to between the provider and the HMO for a covered service (the “reimbursement floor”). However, this statute covers only required services offered by an HMO.

The prohibition on balance billing and the reimbursement floor established for non-contracting providers covers only HMO enrollees. Patients enrolled in preferred provider organizations, other forms of managed care, and indemnity plans are liable for the “balance bill,” i.e., paying the difference between the insurer’s allowed payment and the provider’s billed charge if the provider does not participate in the insurer’s provider network. Individuals insured by these plans typically pay more for out-of-network services than in-network services. Patients have the opportunity to choose whether they wish to absorb the additional expense entailed by going out-of-network. Generally when individuals select these non-HMO types of plans, they expect to pay a balance bill for out-of-network services. When patient choice as to additional out-of-network charges is not an option, however, as is the case with most emergency services such as air ambulances, patients expect that the insurer’s network will include a sufficient range of providers to cover needed services. This is not always the case for various types of specialty care services. It has proven not to be the case for air ambulance services, either.

## **SOME EFFECTS OF THE INTERACTION OF FEDERAL AND STATE LAWS**

Air ambulance services are not subject to Maryland’s balance billing prohibitions or any reimbursement floor provided by Maryland law because the ADA preempts these provisions of State law. Even in the absence of the ADA, State action to mandate

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<sup>15</sup> Health-General Article Subtitle 7 of Title 19 defines the basic requirements for health maintenance organizations.

insurance carriers to offer a service are limited to insurance products governed by State law. Thus, as a result of ERISA, self-insured employers are exempt. The ERISA preemption on self-insured firms is significant. In 2003, about 40 percent of individuals enrolled in employer-sponsored coverage were in self-insured plans. In the entire private market, which includes public employers and the individual market, self-insurance accounts for about 35 percent of covered patients.<sup>16</sup>

Mechanisms that might provide guidance in those areas where no statute or regulation currently applies (such as State health regulations, the State insurance code, Federal aviation regulations, and Federal and State health care regulations), conflict with one another, presenting a jumble of uncoordinated rules that pose hurdles to providers and patients alike. The ADA and ERISA significantly limit the ability of Maryland policymakers to control the provision of air ambulance services. These express Federal preemptions on State legislation mean that if Maryland wishes to establish control over the rates at which air ambulance services are offered, it must do so by regulating other stakeholders such as hospitals and payers, or by mobilizing the market to encourage air ambulance companies and health insurers to negotiate in good faith.

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<sup>16</sup> Maryland Health Care Commission internal analysis of 2003 MEPS Insurance Component and 2004 Medical Care Data Base claims.

## 4. Air Medevac Services in Maryland

Maryland has a unique nationally recognized system of Emergency Medical Services (EMS) and trauma care integrating pre-hospital care, emergency department, trauma, and specialty care.<sup>17</sup> A key element of the system is the clearly defined and well-coordinated roles of public and private air medevac services. Under the Maryland EMS system, MSP Aviation Command transports patients from the primary trauma scene, and air ambulance companies provide most of the inter-hospital transport.<sup>18</sup>

As of September 2006, 19 rotary wing air ambulances were based in Maryland, up from 17 in July 2005. As shown in Table 4-1, Maryland ranked fourth in terms of population per ambulance among 11 states with the most comparable population densities per square mile. One air ambulance, on average, served about 311,000 people in Maryland. Air ambulances are more concentrated, relative to population, in Delaware, Pennsylvania, and Washington, D.C., and just slightly less concentrated than Maryland in Florida and Ohio, but considerably more dispersed in the four remaining states. This comparison should be interpreted carefully as other factors such as weather and terrain, capacity and congestion of roads, age and disease burden of the population, and number of tertiary care centers are not taken in account. All of these factors can influence the demand for air medical transport.

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<sup>17</sup> Institute of Medicine (of the National Academies). *Report of the Committee on the Future of Emergency Care in the United States Health System: Emergency Medical Services at the Crossroads*. Washington, DC, June 2006.

<sup>18</sup> MSP Aviation Command helicopters operate in support of its statewide missions of: (1) medevac flights; (2) search and rescue; (3) law enforcement aerial support; (4) homeland security support; and (5) damage assessment. Approximately 80 percent of the MSP Aviation Command's helicopter operations are devoted to medevac transports, most of which involve transport of trauma patients to trauma centers.

**Table 4-1: Rotary Wing Air Ambulances in Maryland and the 10 States with Most Comparable Population Densities**

| State                       | Rotary Wing Air Ambulances <sup>1</sup> | Population (2000 Decennial Census) | Land Area in Square Miles | Population Density in Square Miles | Population Per Rotary Wing Air Ambulance |
|-----------------------------|---|------------------------------------|---------------------------|------------------------------------|--|
| Florida                     | 44                                      | 15,982,378                         | 65,758                    | 243.0                              | 363,236                                  |
| Ohio                        | 27                                      | 11,353,140                         | 44,828                    | 253.3                              | 420,487                                  |
| Pennsylvania                | 46                                      | 12,281,054                         | 46,058                    | 266.6                              | 266,979                                  |
| Delaware                    | 5                                       | 783,600                            | 2,489                     | 314.8                              | 156,720                                  |
| New York                    | 29                                      | 18,976,457                         | 54,475                    | 348.4                              | 654,361                                  |
| <b>Maryland<sup>2</sup></b> | <b>17</b>                               | <b>5,296,486</b>                   | <b>12,407</b>             | <b>426.9</b>                       | <b>311,558</b>                           |
| Massachusetts               | 4                                       | 6,349,097                          | 10,555                    | 601.5                              | 1,587,274                                |
| Connecticut                 | 2                                       | 3,405,565                          | 5,544                     | 614.3                              | 1,702,783                                |
| Rhode Island                | 0                                       | 1,048,319                          | 1,545                     | 678.5                              | N/A                                      |
| New Jersey                  | 5                                       | 8,414,350                          | 8,722                     | 964.7                              | 1,682,870                                |
| District of Columbia        | 4                                       | 572,059                            | 68                        | 8412.6                             | 143,015                                  |

<sup>1</sup>Rotary wing air ambulances reflect the total number of aircraft licensed. The actual number staffed is smaller. Seventeen air ambulances are licensed in Maryland, but only 13 are staffed and operational at any time.

<sup>2</sup>Maryland rotary wing air ambulances as of July 2005.

Source: Atlas and Database of Air Medical Services as of August 16, 2006, accessed at <http://www.adamsairmed.org/states.htm>.

A comparison of Maryland and the 10 most comparable states in total population (with populations between 4.3 and 6.0 million) showed Maryland again ranked fourth in helicopters per total population (data not shown). On an aggregate population basis, Maryland's comparison group consists of many Midwest and Western states that have significantly greater land areas and lower population densities per square mile.

## PRIMARY SCENE TRANSPORT

The MSP Aviation Command provides helicopter response and EMS care to ill or injured patients from the incident site to a trauma center or to a specialty referral hospital. The MSP has provided over 100,000 scene transport missions since it assumed the function in the late 1970s and has performed without a serious mishap since 1988. Although public agencies in other states provide primary scene air transport, no public agency in another state has as broad an area of authority for scene work as MSP does under the Maryland EMS system. Another public agency, the National Park Police (NPP), operating out of the NPP base at Anacostia Park in Washington, D.C., provides primary scene support to MSP in the Washington, D.C., area and along the Baltimore-Washington Parkway. The NPP flies about 300 primary scene transports per year, a figure that has been fairly static in recent years.

Private air ambulance companies back up MSP on primary scene transport, in addition to serving as the principal provider of inter-hospital transport. Air ambulance companies are licensed to operate by MIEMSS which relies on standards established by the Commission on Accreditation of Medical Transport Services (CAMTS), a national accrediting organization composed of representatives from the air medevac and EMS communities.<sup>19</sup>

Air ambulance companies are licensed by MIEMSS for 1 year. Air ambulance scene transport responsibilities are defined under a memorandum of understanding (MOU) with MIEMSS.<sup>20</sup> Under the MOU, air ambulance companies providing scene transport may bill the patient or the patient's insurance company, but agree not to seek reimbursement from the State, a local jurisdiction, a municipality, or volunteer fire company. An air ambulance company service is not required to execute the MOU in order to be licensed by MIEMSS. Two of the four air ambulance companies that serve the State have signed MOUs with MIEMSS. Despite the significant benefit of the MOU in assuring private sector back up and coordinating responses, a small number of patients transported from the scene by an air ambulance company could be faced with a sizeable bill if the service is not covered by their payor, the air ambulance company is not part of their insurance company's provider network, or they are uninsured and do not meet requisites of the air ambulance company's charity care policy. The number of patients in this situation is small; air ambulance services provided less than a dozen such trips in 2005. The MIEMSS reports that complaints from patients are rare.

As most air ambulance costs are fixed costs, including helicopter acquisition and crew labor costs, companies can improve operating margins by increasing the number of missions flown by a helicopter and crew. One air ambulance company expressed interest in expanding its accident scene work and observed that allowing private firms to provide scene service could lower costs for inter-hospital transport as fixed expenses could be distributed across a large number of total missions. This company argues that MSP's primary role in providing scene transport and secondary role in inter-hospital transport constrain air ambulance companies' ability to increase mission volume. The company's representatives noted that air ambulance inter-hospital charges are higher than might otherwise be the case because companies cannot use scene transport missions to cross-subsidize their complex inter-hospital transport business.<sup>21</sup> Conventional economic theory supports this contention if costs are indeed lower for scene transport. The MHCC was not able to confirm this statement by the company due to lack of appropriate cost data. Further, MHCC was not able to confirm that costs

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<sup>19</sup> COMAR 30.09.13.02, as authorized by Education Article, §§13-508(a)(1)(i) and 13-515(c), Annotated Code of Maryland.

<sup>20</sup> A copy of the MOU is contained in Appendix A.

are lower in other states when air ambulance companies provide both scene and inter-hospital transport. Other leading air ambulance providers in Maryland stated at the September public meeting that they are satisfied with the current arrangement.

## INTER-HOSPITAL TRANSPORT

Three air ambulance companies are licensed to provide service in Maryland as of September 2006; an additional company that participated in the study (Air Methods) provides occasional transport, and under MIEMSS regulations, is not currently required to be licensed.<sup>22</sup> The air ambulance services compete for business under the independent provider model and under the hospital-based model. Under the independent provider model, companies compete for transport referrals on a daily basis with other independent operators in the area. Under the hospital-based model, air ambulance companies compete to provide air ambulance services to hospitals. Air ambulance companies seek contracts with hospitals to ensure a steady flow of patients and thus provide a predictable revenue stream (first-call privileges). Air Methods reported in its most recent annual report that about 62 percent of its revenue generated from hospital-based operations nationwide originates from sponsoring hospitals.<sup>23</sup> In Maryland, hospitals do not reimburse or collect revenue on behalf of air ambulance companies. The willingness of the air ambulance providers to contract with hospitals under less than ideal conditions suggests that the environment in Maryland continues to be viewed favorably by the air ambulance companies.

The market for air ambulance service has sharpened in urban areas of the State over the past year. At least two air operators serve each local urban market, but in rural areas one operator is the rule. Air ambulance operators also compete with ground ambulances. Where travel times are short, ground transport is a viable alternative to air ambulance transport. Several studies have found that ground ambulances provide better outcomes at lower costs for inter-hospital transports when travel distances are 10 miles or less.<sup>24</sup> Helicopters offer an advantage in rural areas where they can easily travel the greater distances between community hospitals and the tertiary care centers in Baltimore and Washington, D.C. The MSP and the commercial bases are well-positioned to respond to

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<sup>21</sup> Patients transported between hospitals often are attached to complex life-support systems that make movement difficult and in-flight patient monitoring complex, thereby significantly increasing the provider costs for such transports.

<sup>22</sup> Under MIEMSS regulations, air ambulance services licensed and based outside Maryland which transport patients (1) from or within Maryland less than 26 times per year; or (2) into Maryland or to and from Maryland for diagnostic or therapeutic services in the same calendar day are exempt from state licensure requirements, COMAR 30.09.13.

<sup>23</sup> Air Methods. *2005 Annual Report*. Denver, CO, 2006.

<sup>24</sup> Arfken, Cynthia L., Shapiro, Marc J., Bessey, Palmer M., Littenberg, Benjamin. "Effectiveness of Helicopter versus Ground Ambulance Services for Interfacility Transport," *The Journal of Trauma Injury*. Vol. 45, No. 4, 1998, pp. 785-790.

the needs in the more rural areas of the State. Table 4-2 summarizes characteristics of the four companies.<sup>25</sup>

- MedSTAR Transport, a business unit within MedSTAR Health, operates from bases in Maryland and Washington, D.C. MedSTAR Transport is the only operator owned by a Maryland hospital system. As a unit in a large health care system, MedSTAR Transport has some cost advantages over aviation-only companies. As part of a large health care system, its air ambulance business is obliged to meet broader needs of the communities in which the system operates, including providing uncompensated care transport to uninsured patients.
- STAT MedEvac is part of the Center for Emergency Medicine, a consortium of Pennsylvania hospitals. The Center's member hospitals include the University of Pittsburgh Medical Center, Children's Hospital of Pittsburgh, Mercy Hospital, Western Pennsylvania Hospital, and Altoona Hospital. STAT MedEvac's bases in Maryland are beyond the service areas of Consortium hospitals. STAT MedEvac serves Maryland from bases in Hagerstown, Baltimore, and at Children's Hospital in Washington, D.C. The base in Baltimore serves primarily the Johns Hopkins Health System. STAT MedEvac's charity care policy is based on the Federal poverty level (FPL). Patients with family incomes below 400 percent of FPL (under \$62,880 for a family of three) pay 30 percent of billed charges, and patients with family incomes below 200 percent of FPL (under \$31,440 for a family of three) pay nothing at all.<sup>26</sup>
- PHI is a publicly-traded company providing diverse air transport services to markets across the United States.<sup>27</sup> In the Mid-Atlantic region, PHI is a major provider of air ambulance services in Virginia. In the spring of 2006, PHI contracted with the University of Maryland Medical System (UMMS) to provide air ambulance service to that system.
- Air Methods, also a publicly traded company (operating as LifeNet in Delaware), contracts with the Christiana Medical System in Newark, Delaware, and serves Maryland from that Delaware base as well as from Fredericksburg, Virginia.

Both PHI and Air Methods emphasized in meetings with MHCC that they do not screen patients for insurance. The annual reports of both companies state that bad debt and charity care are significant costs affecting profits.<sup>28</sup>

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<sup>25</sup> Another half dozen companies fly occasional missions in the State, but they are not active in the Maryland market. See Appendix C for a list of companies that have served patients insured by Maryland payors.

<sup>26</sup> Internal communications from STAT MedEvac and MHCC, November 2006.

<sup>27</sup> In addition to its medevac business, PHI provides air transport services to a variety of industries. Air Methods, by contrast, is concentrated in air medevac and helicopter medevac customization.

<sup>28</sup> Air Methods. *Annual Report for 2005*. Edgewood, CO, pp. 15-17, 32; and PHI. *Annual Report for 2005*, Lafayette, LA, p. 10.



Table 4-2: Air Ambulance Companies Serving Maryland

|  | Not For Profit                      |                            | For Profit             |   |
|--|-------------------------------------|----------------------------|------------------------|---|
|  | MedSTAR Transport                   | STAT MedEvac               | PHI                    | Air Methods   |
| Total rotary wing air medevac aircraft operated in Maryland  | 4                                   | 3                          | 2                      | 2   |
| Number of bases in Maryland  | 3 -- Frederick, Easton, Indian Head | 2 -- Hagerstown, Baltimore | 2 -- Baltimore, Easton | 0 -- Operates from Delaware, Virginia                                     |
| CAMTS certified  | Yes                                 | Yes                        | Application Pending    | No, LifeNet, Air Methods' subsidiary operating in Delaware, is accredited |
| FAA 135 certificate operator   | No                                  | No                         | Yes                    | Yes   |
| Total rotary wing air medevac aircraft owned/leased in U.S. <sup>1</sup>   | 4                                   | 17                         | 64                     | 184   |
| Total revenue from air ambulance operations in U.S. <sup>2</sup>   | N/A                                 | \$55 million               | \$112 million          | \$329 million   |
| Licensed by MIEMSS   | Yes                                 | Yes                        | Yes                    | No  |
| Holds an MOU with MIEMSS to provide scene transport  | Yes                                 | No                         | Yes                    | No  |
| <sup>1</sup> Source: Atlas and Database of Air Medical Services and corporate annual reports.<br><sup>2</sup> Source: Revenue reported from STAT MedEvac internal data, and PHI and Air Methods 2005 annual reports. |                                     |                            |                        |   |

Air ambulance companies are required to maintain an FAA Part 135 certificate in order to conduct flight operations.<sup>29</sup> Part 135 certificates govern all aviation aspects of the air ambulance operation. The Part 135 certificate operator must meet FAA standards in approximately 200 dimensions of air operations including the following:

- Aviation crew qualifications and training;
- Maintenance crew qualifications and training;
- Operations, maintenance, and safety recordkeeping;
- In-flight operations under visual flight and instrument flight rules;
- Use of autopilot and emergency equipment; and
- Management and control mechanisms for the certificate holder organization.

<sup>29</sup> Federal Aviation Regulations, Part 135 - Operating Requirements: Commuter And On-Demand Operations And Rules Governing Persons On Board Such Aircraft.

The majority of 135 certificate holders are commercial air taxi services unrelated to air ambulance service. Numerous FAA opinions conclude that aviation operations of air ambulances are covered under Part 135 regulations. As the Part 135 certificate governs the aviation aspects of the service, the provider of the aviation component must hold the certificate even if it is not the air ambulance service provider. STAT MedEvac and MedSTAR Transport operate under this arrangement, with each contracting with CJ Systems for pilots and aviation maintenance personnel.<sup>30</sup> CJ Systems holds the Part 135 certificate that permits these two services to operate. Air Methods and PHI hold Part 135 certificates under their own authority; they directly employ pilots and maintenance personnel.

CJ Systems recently signaled its intention to enter the air medical business by acquiring the air ambulance services of the Rapid City Regional Hospital and StatCare, formerly an operating unit of the Louisville Medical Center.<sup>31</sup> These acquisitions point up a national trend for large medical centers to abandon direct ownership of the air medevac business. A recent study on subscription air ambulance services by the Office of the Insurance Commissioner in the State of Washington reported that the lack of air ambulance services in some counties was triggered by one hospital's decision to abandon its air medevac ambulance service after experiencing operating losses of \$500,000 per year.<sup>32</sup> Contracting with an aviation company eliminates the need for the medical center to absorb the labor expenses related to aviation labor, helicopter ownership costs, or lease expenses.

The MSP plays a secondary role in inter-hospital transport. In 2005, MSP flew about 270 inter-hospital transports. Its missions were largely either extensions of the primary scene mission in which the MSP helicopter remains on the hospital landing pad while the patient is stabilized before being transferred by air to a higher level trauma center, or transports for neonatal cases (the MSP helicopters are better able to accommodate the isolette and life support equipment for newborns).<sup>33</sup> The overall number of MSP inter-hospital transport missions declined slightly in the period from 2003 through 2005, after dropping significantly from the peak in 2000.<sup>34</sup>

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<sup>30</sup> STAT MedEvac also contracts with Metro Aviation, another Part 135 Certificate operator, for operation of its aircraft in Pennsylvania.

<sup>31</sup> CJ Systems. Press release dated November 29, 2006, accessed at [http://151.201.211.101/public/media/press\\_releases\\_2006/2006.11.29\\_Rapid%20City\\_final.pdf](http://151.201.211.101/public/media/press_releases_2006/2006.11.29_Rapid%20City_final.pdf) and press release dated September 14, 2006, accessed at [http://151.201.211.101/public/media/press\\_releases\\_2006/2006.09.14\\_statcare\\_final.pdf](http://151.201.211.101/public/media/press_releases_2006/2006.09.14_statcare_final.pdf).

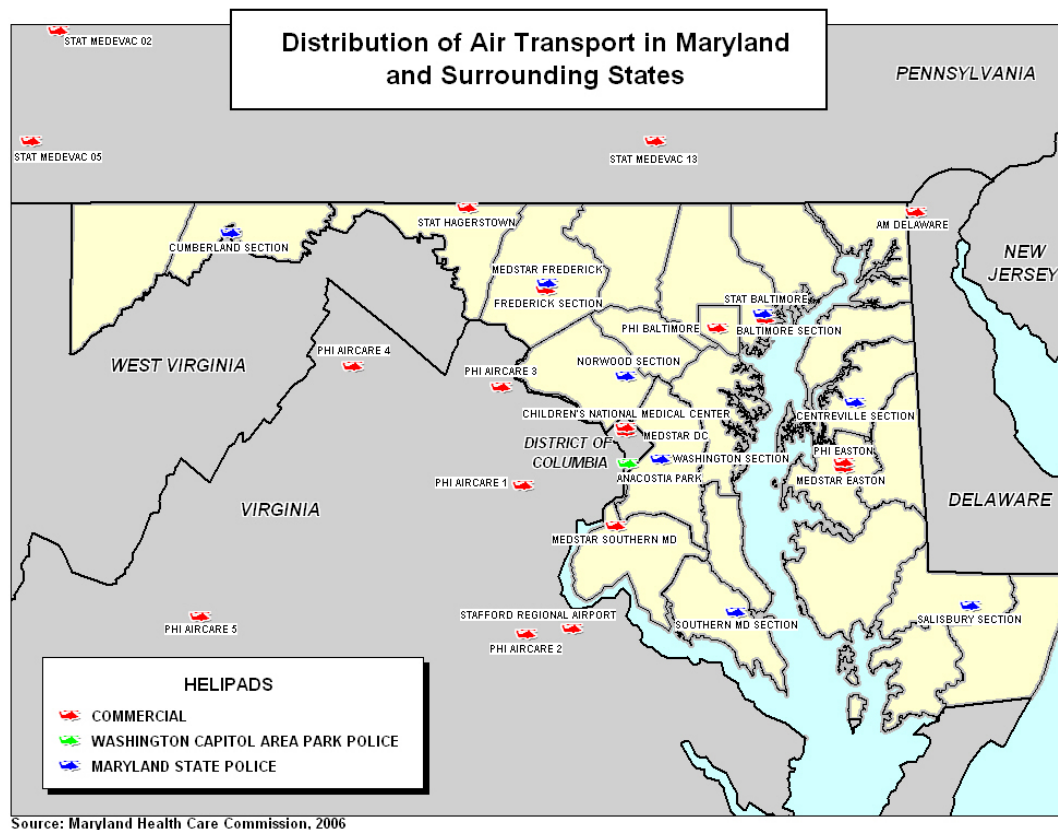
<sup>32</sup> Office of the Insurance Commissioner. *A Report to the Legislature: Air Ambulance Services*. Seattle, WA, December, 2005.

<sup>33</sup> The MSP operates Eurocopter AS365N1 and AS365N2 Dauphins, a roomier, better equipped and more expensive aircraft compared to the Eurocopter AS350/355 and Bell 222/407/412 typically operated by commercial companies.

<sup>34</sup> MSP inter-hospital transports have declined from 292 in 2003 to 274 in 2005. These figures are the most recent decline from a peak of 694 inter-hospital transports in 2000 and an average of 632 transports a year between FY95 and FY01. The EMS Board recommended in 2002 that "[p]rivate helicopters will be the first point of contact for inter-hospital transports for patients who require intensive monitoring and continuation of advanced treatments who are being transferred because of the overall complexity of their management." EMS Board, Inter-Facility Emergency Medical Helicopter Transports in Maryland. State Emergency Medical Services, Baltimore, MD, 2002.

Commercial and public carriers provide a web of overlapping service areas that put most residents of the State within access of air transport services. This occurs either through the primary providing entity — MSP for scene transport and commercial air ambulance for inter-hospital — or from the entities responsible for backup support. Figure 4-1 identifies MSP and commercial air ambulance company bases in Maryland and in neighboring states. Air ambulances based in neighboring states may be launched on missions in Maryland, if primary air ambulances are already committed to missions. In some cases, air ambulances based in adjacent states may be nearest to the sending hospital on an inter-hospital transport.

**Figure 4-1: Distribution of Air Transport in Maryland and Surrounding States**



Most areas of the State are accessible by commercial air transport in reasonable hypothetical response times (from time of first activation to touch down at the hospital). Inter-hospital transport, in many instances, is not as time-sensitive as scene transport as the patient has been stabilized at the sending hospital. The industry does not maintain any best practices on maximum recommended response times even for scene transport. Somewhat surprising is the close proximity of private firms to one another on the

Eastern Shore (denoted by two commercial helicopter icons in close proximity on the map in Figure 4-1). Ideal locations for bases are limited, but companies appear to position helicopters to compete directly with each other. MedSTAR Transport, STAT MedEvac, and PHI all operate helicopters in close proximity to each other in this area of Maryland.

Supplying prompt air ambulance services is particularly difficult in some rural areas because air ambulance providers serve a large geographic area with a low population density, resulting in significant overhead costs. As Figure 4-1 shows, access does not appear to be a current concern in most of the Eastern Shore. Commercial services are less concentrated in Western Maryland, but MedSTAR operates from a base in Frederick and STAT MedEvac from a base in Hagerstown.

## **THE RELATIONSHIP BETWEEN HOSPITALS AND AIR AMBULANCE COMPANIES**

In recent years, hospital systems have abandoned in-house air transport services and turned to public aviation companies. Air transport companies can deploy equipment and aviation crews as different market opportunities present themselves.<sup>35</sup> Aviation companies have a narrow market niche and recover all overhead expenses from their own revenues. An air ambulance company may be more sensitive to fluctuations in the price of aviation fuel or in the demand for labor. They can not cross-subsidize air ambulance transport from other health care lines of business. On the other hand, PHI and AirMethods are both independent of hospital systems, which makes competing hospitals willing to use the same air ambulance service as opposed to a service owned by a competitor.

If patient volume is significant, an air ambulance company will give first priority on obtaining a helicopter to a particular hospital, the “first call” hospital. The UMMS maintains a first-call relationship with PHI, and Johns Hopkins Hospital has a similar relationship with STAT MedEvac. MedSTAR Transport, a part the MedSTAR Health System, provides a comparable service to that System’s hospitals. The most apparent indication of these arrangements is that the helicopter will bear the air medevac name, logo, and colors of the contracting or sponsoring hospital.<sup>36</sup>

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<sup>35</sup> Air Methods reported that its air medical operations generated 98 percent of total corporate revenue in 2005. PHI reported total revenue of \$363 million of which \$112 million was attributed to air medical operations.

<sup>36</sup> Lifeline and Maryland Express Care are the names of the air ambulance services offered by John Hopkins and University of Maryland systems, respectively.

Private air firms' ability to efficiently serve multiple hospitals will decline if branding aircraft with hospitals' logos, colors, and names becomes a widespread practice. Hospitals are hesitant to use an otherwise available helicopter if that helicopter is branded with name and logo of a hospital's primary competitor. Virtually all the hospitals with cardiac surgery programs also maintain contracts with air ambulance services to transport patients to their cardiac programs. Some of these programs would prefer to have their aircraft branded with their hospital's insignia or cardiac program.

Contracts between hospitals and companies typically do not contain any requirements regarding participation with third-party payors. While hospitals have sought to ensure that physicians based in that hospital participate with the same payors as the hospital, aligning air ambulance network participation with their own has not been a priority for hospitals. Hospitals indicated an unwillingness to interject themselves in air ambulance companies' and payors' negotiations, perhaps because air transport is relatively tangential to other hospital operations. Third-party payors and patients are responsible for the payment of these services, and hospitals appear satisfied with the status quo. Hospital contracting strategies appear driven more by the desire to brand their own service with less attention being paid to the cost per trip of the service.

## 5. Coverage of Air Ambulance Services by Payors

Emergency ambulance services are considered medically necessary when the patient's condition is such that other forms of transportation would pose a threat to the patient's survival or would endanger the patient's health. Patients who have sustained trauma or experienced an illness with acute symptoms (e.g., hemorrhagic, shock, chest pain, or respiratory distress); require emergency measures or treatments such as administration of drugs or IV fluids; or require cardiac monitoring, oxygen, respiratory support or cardiopulmonary resuscitation are considered appropriate for ambulance transport. Air ambulance services, as distinct from ground ambulance services, are considered medically necessary when a patient's medical condition is such that:

- land transport poses a threat to the patient's health;
- the patient requires immediate and rapid transport that could not have been provided by a ground ambulance;
- the point of pickup is inaccessible by land vehicle; or
- great distances, limited timeframes, or other circumstances are involved in moving the patient to the nearest hospital with the appropriate facilities.

Typically inter-hospital transports involve moving a critically ill patient from his current treatment site to a different, and generally higher level acuity, facility. Air ambulance transport is covered for transfer of the patient from one hospital to another if (1) the medical appropriateness criteria are met and (2) the transferring hospital does not have adequate facilities to provide the medical services needed by the patient. Examples of such specialized medical services that are generally not available at all types of facilities include burn care, cardiac care, trauma care, and critical care.

Most public and private insurers reimburse emergency air transport to the nearest hospital offering the required service, but no further. Assuming other conditions of an insurance contract are met, a patient transported from one hospital to another hospital is covered only if the hospital to which the patient is transferred is the nearest one with appropriate facilities. Coverage is not available for transport from a hospital capable of treating the patient merely because the patient and/or the patient's family prefer a specific hospital or physician. If a patient or attending physician requests transport to another facility, the insurer typically will cover only the cost of transport to the nearest

facility offering the service. Insurers can and do consider exceptions through an appeals process. Exceptions are issued for some situations, e.g., the transport of a patient severely injured far from home to a facility nearer the patient's home. Other exceptions such as transport to a non-network hospital are unusual, if the service is available in-network. Private insurers sometimes approve air transport of a patient from a non-network hospital if the comparable service is available from a hospital that participates in the payor's network. As the insurer controls the transport, every effort is made to use an in-network air ambulance company.

## **COSTS OF AIR AMBULANCE SERVICES**

Detailed breakdowns on the costs of operation for air ambulance companies are not as numerous as one might suspect. For this analysis MHCC relied on a short survey of major air ambulance companies operating in the State, publicly available trade data, and the annual reports of the two publicly traded companies.<sup>37</sup>

Air ambulance transport is a capital- and labor-intensive operation. A typical air ambulance company owns or executes capital leases for helicopters that have an effective lifespan of 10-20 years. One publicly traded company reported in its most recent filing that 61 percent of costs associated with flight operations (including salaries, aircraft ownership and maintenance costs, insurance, and general and administrative expenses) are mainly fixed in nature.<sup>38</sup> The remaining 39 percent of total operating expenses are variable costs, dependent on the number of hours flown or missions completed. The MHCC believes this distribution between fixed and variable cost is likely consistent for other competitors in the market. With high fixed costs, air ambulance companies can increase profitability most easily by increasing the number of missions flown.

Another approach to assessing cost is by segmenting expenses between labor, capital equipment and leases, consumables, and general and administrative expenses. Major labor expenses include the air and maintenance crews, flight paramedics, and flight nurses. A typical air ambulance will have two full-time pilots per aircraft, each working a 12-hour shift as permitted under FAA regulations. Staffing of the medical component, a flight paramedic and flight nurse, usually includes two crews scheduled in 24-hour shifts. Aviation fuel, replacement parts, base lease expenses, and liability insurance are other significant components of costs. General administrative expenses include corporate management and administrative functions that can be shared across business units and account for roughly 5 to 7 percent of total expenses.

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<sup>37</sup> The survey sent to the air ambulance companies is included in Appendix B.

<sup>38</sup> Air Methods. *2005 Annual Report*. Edgewood, CO, 2006.

Some overhead expenses vary significantly depending on the size and scale of the ownership group. Under the traditional model of air transport, large hospital systems accepted their air ambulance services as loss leaders and sought to disburse some air ambulance costs across the larger organization. As a hospital's air ambulance service is expected to bring patients that will generate significant billable services, the air service may not be expected to be a profitable business line. For example, administrative, information technology, and clerical staff primarily dedicated to the air ambulance operation may be allocated to the larger organization. A hospital-owned operation may be able to offer a lower price per mission as some costs are absorbed by other business units.

## **FACTORS AFFECTING COSTS AND REVENUE**

Air ambulance revenue is highly dependent on flight volume and the ability of the company to collect on accounts. Flight volume is dependent on the underlying population requiring transport, the number of competitors, and environmental factors such as the weather. Eleven commercial air ambulance aircraft actively serve the Maryland market. Air transport is highly sensitive to fluctuations in weather conditions — poor visibility, high winds, and heavy rains limit the safe operation of aircraft and reduce the number of missions due to the inability to fly. Typically, the months from November through February have lower flight volume due to weather conditions. Revenue can be affected by the distribution of calls among competitors, including MSP (which plays a limited role in inter-hospital transport).

Air ambulance companies respond to calls for air transport without pre-screening for health insurance coverage or the creditworthiness of the patient. The companies invoice patients and their insurers directly for services rendered and recognize revenue net of estimated contractual allowances (discounts provided to third-party payors with whom they contract) and uncompensated care write-offs. The cost of uncompensated care is included in the cost of providing air ambulance services. Analysts attempt to distinguish between the “bad debt” and “charity care” components of uncompensated care; “bad debt” refers to those patient charges which a company anticipates it will collect from patients but never does, while “charity care” refers to care provided free or at a reduced fee level due to a patient's financial constraints. The level of uncompensated care experienced by a company is driven by collection rates on accounts and that company's charity care policies. Collections from patients and payors are affected by the number of uninsured indigent patients, and insured out-of-network patients transported. In 2005, air ambulance services in Maryland generated a total of about \$18 million in revenue to all the Maryland air ambulance organizations (Table 5-1).



**Table 5-1: Commercial Air Ambulance Charges, Reimbursement, and Uncompensated Care Costs, 2005**

|   |              |
|---|--------------|
| Total Billable Charges  | \$36,935,000 |
| Total Reimbursed  | \$18,283,000 |
| Number of Inter-hospital Flights  | 5,554        |
| <b>Uncompensated Care (Charity and Bad Debt)</b>  |              |
| Total Trips Written Off to Uncompensated Care   | 591          |
| Total Billable  | \$4,076,000  |
| Total Costs   | \$2,257,000  |
| Average Loss Per UC Trip  | \$3,818      |
| Source: MHCC analysis of industry cost survey. Does not include smaller operations and out-of-state companies |              |

Maryland's uninsured rate is lower than that of the nation overall and has been stable for the last several years. As a result, it is reasonable to assume that uninsured patients as a percent of total patients transported has been stable for the last several years as well.<sup>39</sup> Charity care and bad debt as a percent of total revenue has likely been stable.

## REIMBURSEMENT FOR AIR AMBULANCE SERVICES

When an air ambulance is needed for a patient transfer, the receiving hospital typically requests the air ambulance dispatch. EMTALA<sup>40</sup> requires that the transferring hospital ensure that the patient is stabilized before effecting the transport. Determining that a patient is stabilized requires an attending physician sign-off at the sending hospital. A transfer thus requires the coordination of the sending and receiving hospitals as well as the attending physicians at both. The receiving hospital typically coordinates the air transport, because a physician at the receiving hospital must make arrangements to admit the patient from the transferring hospital. The earliest time at which a patient's insurance coverage status can be known is when the air ambulance arrives at the sending hospital. Often, the billing office of the air ambulance company actually learns of the financial situation of the patient only after the transfer has occurred. The ambulance company attempts to recover what it can from the patient and a third-party payor, if the patient is insured and the service is covered under the contract.

Air ambulance services are billed by air ambulance companies and reimbursed by payors using a base fee and per mile rate. The total billed charge and total allowed amount reimbursed are the sum of the base fee plus the mileage rate multiplied by the number of

<sup>39</sup> The most recent MHCC analyses estimate the total number of uninsured at 780,000. Maryland Health Care Commission (MHCC). *Insurance Coverage in Maryland Through 2005*. Baltimore, MD: MHCC, January, 2007 (forthcoming).

<sup>40</sup> See discussion of EMTALA provisions on p. 11 of this document.

miles flown from the point of pickup of the patient to the destination of the receiving hospital. Listed below is the actual formula:

$$\text{Total Charge} = \text{Base Rate} + (\text{Miles flown from point of pickup to destination} \times \text{Mileage Rate})$$

A broad range of health professionals have questioned the adequacy of private third-party reimbursement. Air ambulance companies have raised similar questions. Air ambulance companies argue that private payor in-network rates are insufficient to cover costs of delivering the service. They argue that low fees are the single biggest barrier to participation.

The number of insured patients that are balance billed is significant and is on the rise. Table 5-2 presents the distribution of patients transported by air ambulance companies in 2004 and 2005. The overall share of air ambulance missions that were provided by contracting air ambulance providers fell from 47 percent in 2004 to 28 percent in 2005. Most of the drop was driven by a decline in the number of air ambulance flights flown by in-network participating providers and a parallel increase in missions flown by non-participating providers. The decline in participation is attributable to changes in market share among the air ambulance companies, with a noticeable increase in share by companies that do not contract and a comparable decline in market share for those that do.

**Table 5-2: Percent Distribution of In- and Out-of-Network Transports, 2004-2005**

|  | Contracting | Non-Contracting | Not Specified |
|--|-------------|-----------------|---------------|
| <b>2004</b>  |             |                 |               |
| Total Private  | 47%         | 50%             | 3%            |
| HMOs   | 53          | 47              | 0             |
| PPO and Other Delivery Systems                       | 44          | 52              | 5             |
| <b>2005</b>  |             |                 |               |
| Total Private  | 28          | 60              | 11            |
| HMOs   | 50          | 47              | 3             |
| PPO and Other Delivery Systems                       | 16          | 73              | 16            |
| Source: MHCC analysis of the Medical Care Data Base. |             |                 |               |

Air ambulance companies cite low reimbursement as the reason for not signing participation agreements. Table 5-3 presents average air ambulance billed and payor-allowed rates for contracting and non-contracting air ambulance providers in 2005. Non-contracting allowed charges are higher than contracting allowed charges for both the base and the mileage charge. Table 5-3 shows that non-contracting air ambulance

companies also have higher billed charges and that payors set higher allowed rates for these providers. Higher allowed rates are a function of the methodology a payor uses to set the contracting and non-contracting rates. The non-contracting allowed rate can be based on a percentage of the billed charge, a percentage of what is paid in-network, or a usual, customary, and reasonable (UCR) rate. Although allowed charges are lower in-network, often the payer will pay a greater share of the allowed charge when reimbursing a contracting provider, essentially guaranteeing a payment level. Although certainty of payment offers some advantages, air ambulance companies likely see these rates as reductions in revenue, which explains their resistance to contracting.

**Table 5-3: Average Rates for Air Transports, 2005-2006**

|  | Air Ambulance Contracting | Air Ambulance Non-contracting | All Air Ambulance Transports |
|--|---------------------------|-------------------------------|------------------------------|
| <b>Base Rate Per Trip</b>  |                           |                               |                              |
| Billed Rate  | \$4,512                   | \$5,559                       | \$5,137                      |
| Allowed Rate   | \$3,578                   | \$4,084                       | \$3,879                      |
| Allowed as a Percent of Billed Rate  | 79%                       | 74%                           | 76%                          |
| Contracting Allowed Rate as a Percent of Non-contracting Billed Rate   |                           | 64%                           |                              |
| <b>Rate Per Mile Flown</b>   |                           |                               |                              |
| Billed Rate per Mile   | \$42                      | \$46                          | \$44                         |
| Allowed Rate Per Mile  | \$29                      | \$31                          | \$30                         |
| Allowed as a Percent of Billed   | 69%                       | 67%                           | 68%                          |
| Contracting Allowed Rate as a Percent of Non-contracting Billed Rate   |                           | 63%                           |                              |
| Note: The total trip amount is based on the sum of the base rate and the per mile rate multiplied by the miles flown (not shown).<br>Source: MHCC analysis of air ambulance claims in the 2005 Medical Care Data Base. |                           |                               |                              |

Contracting air ambulance companies recover 79 percent of billed charges from the base allowed rate and 69 percent of the billed charges on the mileage rate. If non-contracting providers entered into contracts, they could recover 64 percent of the average billed charges base rate and 63 percent of the mileage rate, but in doing so companies also forgo the opportunity to balance bill the patients.

To better understand the relationship among billed charges, payments, and patient liabilities, MHCC aggregated base and mileage payments for each ambulance trip. Table 5-4 presents average billed charges, allowed charges, payor reimbursements, and estimated patient liabilities per trip.<sup>41</sup> On average, contracting air ambulance companies receive about \$4,320 for an air ambulance flight, of which \$3,942 is reimbursed by the

<sup>41</sup> Payments were derived by adding the base rate to the product of the miles flown and the mileage rate.

payor and \$378 is paid by the patient (Table 5-4). A non-contracting air ambulance company is reimbursed about \$3,976 by the payor and up to \$2,889 by the patient. Patient liabilities must be interpreted cautiously for non-contracting air ambulance companies because a significant portion of patient bills are written off in part or in whole. Unless the air ambulance company is able to collect a portion of the balance due from the patient, contracting with a payor would likely lead to higher reimbursement.

The results from Table 5-4 also offer an indication of why an air ambulance company does not participate with payors. The hypothetical in-network payment (\$4,606) constitutes about 67 percent of billed charges for non-contracting providers. Although recoveries on patient balances are uncertain, they could be sufficiently high, on average, to make contracting with payors unattractive. By comparison, contracting air ambulance companies recover about 80 percent of billed charges.

**Table 5-4: Average Charges and Reimbursements for Air Transports, 2005-2006**

|   | Air Ambulance Contracting | Air Ambulance Non-contracting | All Air Ambulance Transports |
|---|---------------------------|-------------------------------|------------------------------|
| Billed Total Charge   | \$5,399                   | \$6,866                       | \$6,321                      |
| Total Payment   | \$4,320                   | \$6,866                       | \$5,544                      |
| Payor Reimbursement <sup>1</sup>  | \$3,942                   | \$3,976                       | \$3,585                      |
| Patient Liability <sup>2</sup>  | \$378                     | \$2,889                       | \$1,959                      |
| Patient Share of Total Payment  | 9%                        | 42%                           | 35%                          |
| Actual Payment as a Percent of Billed   | 80%                       | 100%                          | 88%                          |
| Hypothetical In-network Contracting Total Payment   | \$4,320                   | \$4,606                       | \$4,547                      |
| Hypothetical In-network Contracting Total Payment as a Percent of Billed Charge   | 80%                       | 67%                           | 72%                          |
| Miles Flown Per Trip  | 28                        | 35                            | 33                           |
| <sup>1</sup> Payor reimbursement and patient liability may not equal allowed charge because some payors apply bonuses after calculating reimbursements.<br><sup>2</sup> Assumes that the patient is responsible for the difference between billed charge and payor reimbursement.<br><br>Note: The total trip charge is based on the sum of the base rate and the per mile rate multiplied by the miles flown (not shown).<br>Source: MHCC analysis of air ambulance claims in the 2005 Medical Care Data Base. |                           |                               |                              |

The MHCC examined payor in-network rates for their adequacy in covering costs for a typically efficient company (Table 5-5). Based on limited data from the four largest air ambulance companies, MHCC derived cost-to-charge ratios that ranged from 0.52 to 0.59 (i.e., costs represent from 52 to 59 percent of charges). When these ratios are applied to the billed charge, the average cost per trip is \$3,988. Netting these costs from the in-network payment for the same trip yields \$516 in gross profit per trip and a

margin of 11.5 percent. These estimates should be interpreted cautiously as sizeable air ambulance company capital expenses associated with air ambulance acquisition and leasing may not be uniformly accounted for in the cost data.

**Table 5-5: Estimated Payment, Costs, and Profit for In-network Service for All Trips**

|  |         |
|--|---------|
| Average Ratio of Cost to (Billed) Charge | 0.57    |
| Average Billed Amount                    | \$6,322 |
| Average Cost Per Trip                    | \$3,988 |
| Average In-network Payment               | \$4,547 |
| Gross In-network Profit Per Trip         | \$535   |
| Gross Margin                             | 11.5%   |

## HOW DO PRIVATE RATES COMPARE TO PUBLIC PAYOR RATES?

**Medicare reimbursement.** Unlike private payors, all air ambulance covered services paid under Medicare are in-network — participation is mandatory using the ambulance fee schedule. Federal law has mandated the implementation of a national fee schedule for ambulance services furnished as a benefit under Medicare Part B.<sup>42</sup> The fee schedule applies to all ambulance services, including volunteer, municipal, private, independent, and institutional providers, i.e., hospitals and skilled nursing facilities. Section 1834(l) requires mandatory assignment for all ambulance services. Ambulance providers and suppliers must accept the Medicare allowed charge as payment in full and not bill or collect from the beneficiary any amount other than any unmet Part B deductible and the Part B coinsurance amounts. For air ambulance services where the point of pickup is in a rural area, total payment is increased by 50 percent; that is, a rural adjustment factor applies to the sum of the base rate and the product of the miles flown multiplied by the mileage rate. The rationale for paying more for rural pickup is that air ambulance companies are more widely dispersed in rural areas and thus must often fly further from the base to the point of pickup. While this rural adjustment factor might appear to substantially increase the costs of air ambulance transport to Medicare, the relative percentage of areas considered “rural” in Maryland is small. Of the 648 ZIP codes defined by the U.S. Postal Service and recognized by Centers for Medicare and Medicaid Services (CMS) in Maryland for 2005, only 142 are considered rural points of pickup where reimbursement is increased by 50 percent. Table 5-6 presents the urban and rural rates for air ambulance service under the Medicare Ambulance Schedule.

<sup>42</sup> Section 4531(b)(2) of the Balanced Budget Act (BBA) of 1997 added a new section 1834(l) to the Social Security Act.

**Table 5-6: Medicare, Medicaid, and Average Private Payor Rates for Air Ambulance Services In Maryland**

| 2005 Rates                                       | Urban Rate |          | Rural Rate |          |
|--|------------|----------|------------|----------|
|  | Base Rate  | Per Mile | Base Rate  | Per Mile |
| <b>Medicare</b>                                  |            |          |            |          |
| Washington Metropolitan Area                     | \$3,168    | \$18.67  | \$4,752    | \$28.01  |
| Baltimore Metropolitan Area                      | 2,953      | 18.67    | 4,429      | 28.01    |
| Non-metro Maryland                               | 2,835      | 18.67    | 4,252      | 28.01    |
| <b>Medicaid</b>                                  | 2,300      | 30.00    | N/A        | N/A      |
| <b>Private Payor Average In-network Payments</b> | 3,529      | 29.48    | N/A        | N/A      |

Confusion exists among payors and air ambulance companies on the relatively simple question of whether private payors' allowed charges for contracting providers exceed Medicare fees. One air ambulance company insists that rates offered by several large payors are "well below Medicare." Conversely, payors state that although their allowed rates are above Medicare rates, air ambulance companies are not willing to contract. Misunderstanding results because most private payors do not distinguish air ambulance by urban or rural areas. As shown in Table 5-6, private allowed charges are above Medicare's urban base and mileage fee, but are below the rural base fee and are about on par with the rural mileage rate. Despite disagreement, MHCC's analysis shows that only 5 percent of Medicare air ambulance inter-hospital transports originate in areas where the rural rate applies. Although payors may encounter additional administrative overhead in implementing urban and rural rates and maintaining point of pickup locations in their adjudication systems, the additional costs of rural rates in rural ZIP codes may not be great. Unless a company's mission mix is principally rural, air ambulance companies will not realize significantly increased revenue if payors implement the change. On the other hand, applying the rural rate to all air ambulance missions, as some air ambulance companies contend is necessary to eliminate balance billing, would significantly increase payor reimbursements.

**Medicaid reimbursement.** Air transport of Medicaid patients is a locally defined service. The Department of Health and Mental Hygiene (DHMH) assigns to the Baltimore City Health Department the responsibility for approving air transport for Medicaid beneficiaries. The base transport fee is relatively low compared to Medicare, but the mileage rate is higher than the standard Medicare urban rate, but lower than the Medicare rural rate. Medicaid reimbursement has not been a major issue for air ambulance companies that serve the Medicaid population. Approximately 300 Medicaid patients are transported annually by air ambulance. Air ambulance companies that serve the Medicaid program believe the Medicaid rates are too low for higher volume payers.

## PRIVATE SECTOR AIR AMBULANCE PAYMENTS RELATIVE TO MEDICARE PAYMENTS

Private payor in-network allowed charges are approximately 113 percent of Medicare allowed amounts (Table 5-7). The similarity of the Medicare and private fees is not surprising because private payment rates in general are, on average, comparable to Medicare fees. By contrast, allowed charges for non-contracting providers are about 130 percent of Medicare fees, not including the patient balance bill. If the patient balance bill is included, the average non-contracting fee is about 180 percent of the average Medicare fee (data not shown).

The differences between in-network and out-of-network payments warrant further explanation. The differences in payments are magnified because payors with relatively high reimbursement levels have no in-network providers. Non-contracting providers recover only about 52 percent of their total potential charges from the payor. The difference between the amount billed and the payor's payment (the balance bill), which is the responsibility of the patient, constitutes almost half of the potentially recoverable revenue. This revenue is potentially collectible because all companies have charity programs and collection policies which define when a service can be deemed an uncollectible debt.

Air ambulance companies contend that the Medicare fee (urban rate), developed using cost data from the industry in the late 1990s and updated annually since 2002 using an overall update factor, has not kept pace with cost trends for the industry. However, the industry generally agrees that the rural rate (150 percent of the urban rate) makes rural transport financially attractive for firms serving Maryland. The rural reimbursement rate is higher, but this rate was applied in only 5 percent of Medicare inter-hospital transports in 2004.<sup>43</sup> Although the Medicare rural air ambulance rate is favored by air ambulance companies, MHCC was not able to identify payors that reimburse in-network providers at this level. Some payors reimburse out-of-network providers at fees above the Medicare rural rate, but these often involve single cases in which payors are interested in closing the claim quickly.

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<sup>43</sup> MHCC analysis of the 2004 Medicare Physician Standard Analytic File.

Table 5-7: Payor Payments for Air Ambulance Transport, 2005

|  | Average<br>Private | Medicare | 125 % of the<br>Medicare Rate | Ratio of Current<br>Payment to<br>Medicare<br>Allowed Charge | Ratio of Current<br>Payment to<br>125% of<br>Medicare<br>Allowed Charge |
|--|--------------------|----------|-------------------------------|--|---|
| Total Payment  |                    |          |                               |  |   |
| Contracting  | \$4,288            | \$3,786  | \$4,483                       | 1.13   | 0.96  |
| Non-contracting  | 5,009              | 3,802    | 4,450                         | 1.32   | 1.10  |
| Total  | 4,677              | 3,795    | 4,462                         | 1.23   | 1.05  |
| <p>Note: The total trip amount is based on the sum of the base rate and the per mile rate multiplied by the miles flown (not shown). Medicare fees calculated based on the ZIP code of the patient because ZIP code of the point of pickup was unavailable.</p> <p>Source: MHCC analysis of air ambulance claims in the 2005 Medical Care Data Base.</p> |                    |          |                               |  |   |



## 6. Options for Air Ambulance Services

The substantial out-of-pocket expenses for air ambulance transport that many patients incur pose problems for all stakeholders. Part of the wide variation in patient out-of-pocket expenses results from the wide variation in fee levels among private payers and air ambulance companies. Additional variation arises from the participating or non-participating status of the specific air ambulance service called to transport the patient. Whatever the source of the variation, patients facing a large co-payment may variously blame the air ambulance service, the health plan, or the hospital arranging for the transportation — particularly if the air ambulance flies with the hospital's logo on its side.

Efficient regulatory solutions are not easy to identify. As changes in the Federal ADA or ERISA statutes are not likely, state actions to lower patient out-of-pocket expenses must avoid direct regulation of the rates of the air ambulance services themselves, while still reducing the unpredictable cost of the service to the patient.

Market forces are also not an easy answer. The doctors and hospitals selecting the air ambulance service provider for a particular trip are not responsible for negotiating rates with the provider, nor are they necessarily bound to choose an in-network provider. For payors, the number of flights and payments involved represent a fraction of services paid, thus greatly reducing the incentive to contract. Further, the limited number of alternative air ambulance service providers may limit the incentive of the provider to enter into a contract.

The MHCC considered the following options:

- Option 1. Regulate air ambulance services as a Medicare Part B hospital service, provided by the hospital through contracts with air ambulance services.
- Option 2. Require insurers to provide air ambulance services under network adequacy standards.
- Option 3. Establish a payment floor for air ambulance services.
- Option 4. Use improved market information to encourage air ambulance companies, hospitals, and payors to negotiate in good faith.
- Option 5. Monitor patient complaints and air ambulance companies' losses on scene transport.

The following section describes the options, identifies the scope (scene, inter-hospital, or both), discusses challenges, and highlights perspectives of various stakeholders.

Ambulance service is not a required health care service, except in the small group market. HMOs that sell in the State include ambulance service when medically necessary. Options that set requirements on payors assume that air ambulance service is a mandated service.<sup>44</sup> Without a mandate, payors could avoid covering the service by eliminating the benefit. Table 6-1 summarizes the scope of each proposal, identifies the risk of preemption under ADA or ERISA, and indicates whether other changes in State law are required for the option to be implemented.

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<sup>44</sup> Title 15. Health Insurance, Subtitle 8. Required Health Insurance Benefits and Title.

Table 6-1: Summary of Options

|  | Option 1.<br>Add Air Ambulance<br>Services to<br>Hospital Rates   | Option 2.<br>Require Payors to<br>Provide Air<br>Ambulance<br>Services under<br>Network Adequacy<br>Regulations                             | Option 3.<br>Establish a 125%<br>Payment Floor for<br>Air Ambulance<br>Services                                  | Option 4.<br>Provide<br>Information<br>through Hospital<br>and HMO/PPO<br>Reporting   | Option 5.<br>Monitor Patient<br>Complaints about<br>the Cost and<br>Quality of Air<br>Ambulance Service |
|--|---|---|--|---|---|
| Require Air Ambulance as a Health Care Service | No  | Yes   | Yes  | No  | No  |
| Applies to Scene Transport                     | Yes, private insured and uninsured  | Yes, limited to private insured   | Yes, limited to private Insured  | No  | Yes   |
| Applies to Inter-hospital Transport            | Yes, private insured and uninsured  | Yes, limited to private insured   | Yes, limited to insured  | Yes   | Yes   |
| Risk of ADA Challenge                          | Yes   | No  | Yes  | No  | No  |
| Risk of ERISA Challenge                        | Yes (low)   | No, if self-insured are exempt  | No, if self-insured are exempt   | None  | None  |
| Requires Statutory Change                      | Yes, HSCRC statute (Health General)   | No, Insurance Regulations   | Yes, Health General, Insurance   | Yes, to share quality info from MIEMSS  | No  |
| Benefits to Uninsured                          | Yes   | No  | No   | No  | Possibly for scene  |
| Other Impacts                                  | Requires approval by CMS  | Requires MIA to re-open network adequacy regulations  | Likely to trigger efforts to expand to other services  |   | Very limited scope and limited impact on inter-hospital   |
| MHCC's Feasibility Assessment                  | Not feasible, not a hospital service, can not be implemented on an all-payor basis. CMS will likely not approve rate-setting for a Medicare Part B service. | Not feasible, would need to be a required service. Network adequacy standards aimed at commonly used services. MIA will not support adding. | Not feasible, would need to be a required service. Impossible to pass a law setting rates for one provider type. | Feasible, cost and reimbursement information could be published now. Quality info from MIEMSS may require a statutory change. | Feasible, must designate either MIEMSS or another agency to be a point of entry for complaints.         |
| Supported By Air Ambulance Companies           | No  | No  | No   | Divided   | Divided   |
| Supported by Payors                            | No  | No  | No   | Yes   | Yes   |
| Supported by Hospitals                         | No  | No  | No   | Yes, but not at a hospital site   | Yes   |

***Option 1. Define air ambulance service as a required hospital service subject to rate regulation.***

**Scope:** Applies to scene and inter-hospital transport (non-Medicare and Medicaid).

**Description:** The MHCC considered defining air ambulance transport as a required hospital service subject to rate regulation. Under this option, air ambulance transport would be considered a separate service subject to HSCRC regulation, but independent of the current system that regulates hospital inpatient services (Medicare Part A) under the existing Medicare waiver. Hospitals would contract with air ambulance service providers, obtaining the best available rate. As the new service would be independent of the existing system, the Medicare waiver would not be jeopardized, and air ambulance services under Medicare and Medicaid would be reimbursed as they now are as a Part B service. To sustain and legitimize the system, hospitals would be required to provide cost data to the State so that rates for the service could be established by the HSCRC. Over time, fees charged by air ambulance companies could converge as public reporting by hospitals could flatten out price differences, except for incentives incorporated in the law.

**Challenges and Benefits:** Under Maryland law, the HSCRC is required to set rates that are reasonably related to costs for Part A inpatient services as defined by Medicare and for outpatient services provided at the hospital. Medicare and Medicaid pay for these services at the HSCRC-established rate. Air ambulance services are neither Medicare Part A hospital services nor outpatient services provided at the hospital. Although the system would be independent of current rate-setting, it would introduce variation in the system. This outcome conflicts with the HSCRC's longstanding principle of equity in payment.

This option violates one of the key principles of an all-payor methodology — that is, all payors pay the same amount. The State-regulated air ambulance system would produce a bifurcated system in which the private payors pay the rates set by the State based on costs, and the public payors would pay based on their own criteria. Air ambulance services, under CMS regulations, are considered Part B services and would be paid using the ambulance fee schedule. Finally, a change in State statute is necessary before HSCRC could regulate the service. An ADA challenge is possible from any of the affected parties — air ambulance companies, hospitals, and payors. A benefit of this option is that it is of sufficient scope to cover primary scene and inter-hospital transport.

**Stakeholders Perspective:** Representatives of Maryland hospitals expressed serious reservations about assuming the role of collection intermediary between payors and air

ambulance providers. Hospitals object to billing patients for a Part B professional service. Currently, physicians make decisions on how and where patients should be transferred. The issue of payment involves contractual relationships between payors and air ambulance service providers. These are not decisions that are made by hospitals, and hospitals have very limited impact on their outcome. Including hospitals as an intermediary will likely add billing costs and payment delays.

Private payors expressed concerns about this proposal due to an inevitable shift in costs to the private payors. Bifurcated payment from air ambulance services will lead to a cost shift because the under-attainment of costs incurred by Medicare and Medicaid recipients and the uninsured for air transport services will likely be recovered through the HSCRC-regulated fees, resulting in higher premiums paid for privately insured individuals (i.e., businesses, workers, and individuals not receiving public health coverage). Air ambulance companies do not support changes that will force them to accept a rate-regulated payment, unless that payment is higher than the company's costs. Patients could benefit with lower co-payments and co-insurance as hospitals providing in-network services would provide the benefit. Over the long term, costs could be higher as payments trickle through the system in higher premiums. However, those increases would be small as total spending on this service is about \$18-20 million.

***Option 2. Require insurers to provide air ambulance service under network adequacy standards.***

**Scope:** Applies to scene and inter-hospital transport, but limited to patients covered by PPOs and other insurers subject to the network adequacy statute.

**Description:** SB 686 (HB 1003) passed in the 2006 Session of the Maryland General Assembly requires that health insurers maintain accurate information regarding their networks of contracting providers and directs the Maryland Insurance Administration (MIA) to develop regulations to define what constitutes an adequate network. The legislation also requires an insurer to limit a member's or enrollee's cost sharing requirements to "in-network" levels if it is determined that they cannot reasonably access an in-network provider and must see a non-contracting provider. The law directs the MIA to develop regulations that require PPOs to document standards used for defining an adequate network. Sponsors of this legislation intended the new law to require PPOs and other insurers to provide more information to consumers regarding their networks, to require PPO plans to have adequate supplies of commonly used physician specialists such as pediatricians and obstetricians, and to provide financial protections to the patient when a needed service is not available from a provider in the PPO's network. The sponsors did not envision that network access to air ambulance

services would be a major issue because these services are used infrequently. It is possible, however that air ambulances could be included in these regulations.

**Challenges and Benefits:** The narrow application of this option limits its appeal. Self-funded employers are not covered due to ERISA preemptions. The existing Maryland HMO law already imposes similar requirements on HMOs that operate in the State. The scope of coverage in the private market is limited because self-insured plans would not be covered by this law — also as a result of ERISA preemption. The MIA is working on the standards for network adequacy. The MIA’s main emphasis is on commonly used specialty care, not highly specialized services such as air ambulance service. If air ambulance service is included, it could increase pressure on the MIA to define adequacy standards for a host of minor services. The complexity of the regulations would make enforcement of the new law difficult and require reopening HMO regulations to align with the regulations under development for PPOs and other insurers. The added complexity of the regulations, coupled with the potential increase in the number of services for which PPO plans would have to demonstrate adequacy, would likely increase administrative costs to the plans. MIA reviews of plan conformance with adequacy standards would become more resource intensive.

**Perspective of Stakeholders:** Most stakeholders oppose this option. Insurers argue that additional standards could increase costs and limit plans’ flexibility to negotiate for seldom-used services. The business community is likely to oppose this option as it would expand the list of required health care services. Providers such as physicians and hospitals could argue that expanding the network adequacy standards is not appropriate for infrequently used services. Requesting the MIA to consider air ambulance service could complicate and delay the adoption of the regulations.

***Option 3. Modify Maryland law to require that third-party payors reimburse out-of-network air ambulances at 125 percent of the Medicare urban rate in the same locality, if the air ambulance company agrees not to balance bill the patient.***

**Scope:** Applies to scene and inter-hospital transport, but limited to patients covered by the HMOs, PPOs, and private insurers that write insurance contracts under Maryland law. All self-insured employers would be exempt due to ERISA preemption.

**Description:** Current Maryland law sets a payment threshold for non-contracting providers that provide a covered service to an HMO enrollee (HG §19-710.1). This option would expand that concept by applying the 125 percent rule to all payors, including PPOs and HMOs. Acceptance of the new 125 percent rule would be contingent on the air ambulance company waiving their right to balance bill. To

accommodate concerns about ADA preemption, an air ambulance company could be permitted to balance bill, as is current practice, but the 125 percent payment guarantee would not apply in that situation.

**Challenges and Benefits:** Like the first two options, this option will require statutory changes. Air ambulance service must be added to the list of required health care services and the laws governing third-party payment must be expanded to cover this special protection. This option will establish a transparent payment standard, which is of benefit to all stakeholders. The Medicare fee is not the preferred fee for ambulance companies or payors, however a compromise using a publicly reported fee could stabilize payments for a needed emergency service. As the option sets a payment floor for payers and air ambulance companies, a service will know what is minimally reimbursed at the point of pickup. A privately insured patient or family member will be able to ascertain the payment obligation before the service is provided.

A challenge will be limiting this law to air ambulance services. Limiting a legislative proposal to air ambulance services will be difficult. Most provider groups rank reimbursement reform at the top of their legislative proposals. If all health care professional payments were pegged at 125 percent of the Medicare fee, the financial consequences would be severe. Health care professional services (physician and other professional) account for just under one third of spending by the privately insured. Third-party fees are, on average, currently about 100 percent of Medicare fees. Raising out-of-network fees across the board would have a cascading impact on in-network fees. At the extreme, health professional reimbursement could increase by 25 percent, which could increase health care premiums by over 8 percent. If the bill were able to limit the reimbursement to affect only air ambulance services, the direct impact on premiums would be minor (less than 0.1 percent).

**Perspective of Stakeholders:** Payors argue that setting fee levels for non-contracting providers drives up reimbursement for contracting providers and produces disincentives for joining a network. Payors contend fee floors discourage providers from signing contracts, especially when highly specialized services are involved (payors cannot offer high patient volumes as an inducement to participate in a network). Employers and other insurance plan sponsors often oppose measures that discourage network participation and likely would strongly oppose this option if it applies to a broad range of providers. Employers could respond to rising insurance premiums by increasing the share of insurance premiums paid by consumers, dropping coverage, increasing patient liabilities, or moving to self-insured products that would not be governed by State law. None of these responses are beneficial to consumers. The air ambulance companies may approve of a fee floor in concept, but are not content with the 125 percent payment

level. Some air ambulance companies indicate that they would not comply unless the fee floor is set above 125 percent of Medicare. Consumers might see a benefit due to the controls placed on co-payments and deductibles. Overall, consumer reaction would be dependent on the scope of the legislation. If the 125 percent rule applied to all services, consumers would see health professionals leave networks with a resulting disruption of care. In addition, significant increases in premiums could result. An across-the-board and abrupt change in payment level would not be favorable to consumers when measured against either a quality or costs yardstick.

***Option 4. Use improved market information to encourage air ambulance companies, hospitals, and payors to negotiate.***

**Scope:** Has indirect impact on inter-hospital transport through increased transparency.

**Description:** Making information available to stakeholders could help the market work better by leveling variations in price and perhaps improving the quality of services that are delivered, while giving air ambulance companies incentives to participate in networks. The MHCC and HSCRC could publish reports on air ambulance services by including them on their Hospital and HMO Performance Guide Web sites. These reports could include data on air ambulance providers, billing rates, patient volumes, and participation in specific networks. Over time, information gathered by MIEMSS during licensing could be added to the site. Maryland's nationally acclaimed air ambulance licensure process is built on industry-driven accreditation, recognized best practices, and careful review of individual company compliance with the standards. Individual scores are not published and cannot be made public under current State law. When permitted, MIEMSS could share information on the performance of air ambulance companies. With information on cost and quality, insurers, hospitals, and patients could make more intelligent purchasing decisions.

**Challenges and Benefits:** The information developed pursuant to this option could be valuable to payors and hospitals that establish network participation and first-call arrangements with air ambulance companies. HMOs and PPOs could have greater incentives to contract, if information on prices and quality of service were publicly reported. The current scarcity of in-network air ambulance services will likely be corrected if information of this sort is publicly available. Hospitals might reconsider their contracting arrangement if their first-call air ambulance company did not participate in insurers' networks, provided a low number of missions in the State, or performed poorly in the MIEMSS licensure process. Air ambulance companies could benefit by being able to gauge their individual performance against the rest of the



industry. To correct low scores or high billed rates, air ambulance companies may be encouraged to consider efficiencies to improve quality and lower costs.

In a perfect world, public reporting and transparency produce benefits for all stakeholders. In the real world, it seldom works exactly that way and less desirable outcomes are possible. Publicly reporting payment levels could cause payments to settle at the high end. Air ambulance companies could be hesitant to offer large insurers or big hospitals their most favorable rates, if information is available to all purchasers of the service. Payors might respond to the adverse publicity by dropping coverage all together. Information dissemination efforts often act as weak incentives. A hospital could decide that having the hospital's brand and logo on the side of an air ambulance generates more positive publicity than public reporting on the costs and quality of the service.

**Perspective of Stakeholders:** Air ambulance companies opposed this option. Several companies argue that publishing cost and payment levels will give consumers and others a misleading picture in the absence of quality information. Hospitals support this idea in concept, but oppose posting the information on the MHCC Hospital Quality Reporting site. They argue that hospitals should not be held responsible for the costs or quality of a service that they do not manage and cannot control, and that having such information on their Web site would make it appear that they do manage and control both. Payors are largely indifferent to this option. They observe that payors already hold information on costs similar to that which would be publicly available. The MHCC recognizes that for emergency and urgent critical care, the patient has little time to plan. It is unlikely that a patient or family member could access the information in a timely fashion in an emergency situation. However, posting air ambulance information along with information on HMO or hospital services would consolidate information about services provided in the same package of care. Air ambulance information would give consumers a more complete portfolio of information on the cost of health services, which when evaluated prospectively, could help shape a decision on where to select insurance coverage or to seek care.

***Option 5. Designate MIEMSS to monitor complaints on air ambulance services.***

**Scope:** Applies to scene and inter-hospital transport through a defined complaint process.

**Description:** MIEMSS should be designated as the first point of contact for consumer complaints about air ambulance service. No State agency is currently assigned responsibility for accepting and resolving complaints on air ambulance service.

Complaints can surface in MIEMSS, MIA, and the Attorney General's Consumer Complaint office or in the General Assembly. The MIEMSS is the appropriate point of entry as it is the State agency charged with licensing air ambulance companies. The MIEMSS possesses the expertise to resolve many complaints and to redirect insurance-related questions to the MIA and legal issues to the Office of the Attorney General. As part of the complaint monitoring function, MIEMSS could inform policymakers of complaints as part of its annual report. If public reporting was initiated as outlined in Option 4, it is possible that information on complaints could be provided from that site.

**Challenges and Benefits:** If a complaint process had already been in existence, it is possible that the need for this study could have been avoided. While a State resident has the right to seek redress through elected officials, efficient operation of government suggests that an executive agency should first attempt to resolve complaints using a standard process. Some reimbursement issues affecting air ambulance services, however, may be beyond remediation by any State agency, given the primacy of the ADA in regard to air ambulance providers. Likewise, ERISA may prevent the State from intervening when a self-insured company limits or denies coverage for air ambulance service. A resident would be well served to be made aware of that information at the earliest moment, rather than leaving the issue unresolved. Information on how to submit a complaint on air ambulance services could be included along with other EMS information that the Motor Vehicle Administration provides to automobile owners as part of the biannual automobile renewal process.

**Perspective of Stakeholders:** This option has the narrowest application of all options. Impact on the central issue of this study, patient out-of-pocket expense, will be both indirect and limited. From the perspective of consumers, the benefits could be judged of little consequence and would not go far in resolving the issue of large patient out-of-pocket payments for inter-hospital transport. However, this option could be implemented as part of a broader initiative including Option 4 that could lead to contracting and reductions in costs. Hospitals and payors were generally supportive of this option. Ambulance companies suggested this option would have little impact, as the number of complaints that they receive is very small.

## 7. Conclusion

The State has limited authority to remedy significant balance bills that patients face after receiving emergency air transport services. The broad sweep of the ADA is the primary constraint to action. Wide variation in patient liability for essentially equivalent services is especially frustrating because the patient cannot control the contracting process between payor and air ambulance company, nor the health care providers' decisions on which air ambulance service will fly the mission.

The regulatory options that the study examined are administratively complex, require significant changes in law, and produce unintended consequences in the market. Applying a rate-setting approach to a specialized and infrequently used service as was outlined in Option 1 conflicts with basic principles of an all-payor system, and would increase the State's costs for administering the rate-setting system. Option 2 (include air ambulance under network adequacy) and Option 3 (establish a voluntary floor on payments) increase administrative expenses for providers and for payors that provide and reimburse the service. All three options could trigger ADA challenges and none generated support among the stakeholders that participated in several meetings. Option 4, which makes information more available in the market, and Option 5, which defines a complaint process, are less intrusive to air ambulance companies, hospitals, and payors. Public reporting of cost information and, ultimately, quality measures along with monitoring complaints would not significantly increase costs to the State. These options received mixed support from the affected parties, while Option 5 received at least lukewarm support from all.

At the end of the initial meeting in September, and at the start of the final meeting in December, MHCC called on payors and air ambulance companies to renew efforts to establish in-network participation agreements. Success in establishing fair participation arrangements in which reimbursement covers costs for a typically efficient air ambulance provider will play an important role in resolving the current impasse.

Between the two meetings, MHCC emphasized to several hospitals the importance of encouraging network participation, confirming billed charges are reasonable, and determining if charity care policies exist. Hospitals can play a role in ensuring the smooth delivery of this service. Hospitals are understandably hesitant to be directly involved in this controversy. As the leading party in the strategic alliance with air ambulance companies, hospitals should review an air ambulance company's position on contracting with payors, use of balance billing when contracting is not possible, and

program for providing charity care prior to committing to a strategic alliance. These steps may avoid later misunderstandings and controversy.

The MHCC and other State agencies are available to provide additional information or support for any of the negotiations that take place.

# Glossary

|                                    |   |
|------------------------------------|---|
| Air Ambulance Fee Schedule         | The payment system introduced by CMS in 2002 to reimburse providers for ground and air transport. The system is based on standard levels of payment for specific HCPCS codes adjusted by geographic cost factors that take into account differences in providing the service across the U.S.  |
| Allowed Amount                     | The payor-defined maximum payment to be paid by the payor and the patient.  |
| Balance Bill                       | The difference between the billed amount and the portion of the allowed amount paid by the payor.   |
| Billed Charge                      | The amount charged by a provider for a service before any discounts are applied by the payor.   |
| Community-based Model              | The air ambulance company competes for patients within the community in which it is based. Volume depends on the population needing transport, the number of competitors, and geographic factors such as existing road network and terrain.   |
| EMS                                | Emergency medical services.   |
| Fixed Wing                         | Airplane.   |
| Geographic Adjustment Factor (GAF) | The GAF is one of two factors intended to address regional differences in the cost of furnishing ambulance services. The GAF for the ambulance fee schedule uses the nonfacility practice expense (PE) of the geographic practice cost index (GPCI) of the Medicare physician fee schedule to adjust payment to account for regional differences. Thus, the geographic areas applicable to the ambulance Fee Schedule (FS) are the same as those used for the physician fee schedule. |

|                               |   |
|-------------------------------|---|
| Hospital-based Model          | The air ambulance company provides first-call service to the contracting hospital. In Maryland, contracts do not typically involve any payments by the hospitals to the air ambulance for providing the first-call privilege. |
| Inter-facility Transport      | Medical care provided en route between two medical facilities, usually between a local community hospital and a regional trauma center or other specialty center.   |
| Patient Liability             | The amount owed by the patient including co-payments, deductibles, and co-insurance.  |
| Payor Contracting Rate        | The rate paid by the payor per HCPCS code (A0431, A0436) when the air ambulance company has a contract with the insurance carrier or HMO.   |
| Payor Non-contracting Rate    | The rate paid by the payor per HCPCS (A0431, A0436) when the air ambulance company does not have a contract with the payor and can balance bill the patient.  |
| Point of Pickup (POP)         | Point of pickup is the location of the beneficiary at the time he or she is placed on board the air ambulance.  |
| Primary Scene Transport       | Medical transport provided between the site of the accident or injury and the hospital.   |
| Response Time                 | Time elapsed from time the air ambulance is activated to touch down at the site of patient pickup.  |
| Rotary Wing                   | Helicopter.   |
| Rural                         | A region of the country that is outside of any Standard Metropolitan Statistical Area. Typically, rural areas have longer distances between homes and medical services and more limited hospital and physician services.      |
| Rural Adjustment Factor (RAF) | RAF is an adjustment applied to the CMS air ambulance payment amount for ambulance services when the point of pickup is in a rural area.  |

Tertiary Hospital Care

A specialized, highly technical level of health care that includes diagnosis and treatment of disease and disability in large, sophisticated research and teaching hospitals serving a large geographic region. Specialized intensive care units, advanced diagnostic support services, and highly specialized personnel/specialist physicians for cardiac, medical, trauma, neurological, pediatric, and neonate/infant care, are characteristics of tertiary health care.

Trauma

A bodily injury produced by blunt force, puncture, high impact, or shock.

# Appendix A

## Memorandum of Understanding Governing Scene Transport

### MEMORANDUM OF UNDERSTANDING BETWEEN MARYLAND INSTITUTE FOR EMERGENCY MEDICAL SERVICES SYSTEMS AND THE DEPARTMENT OF STATE POLICE AND A **COMMERCIAL AIR AMBULANCE SERVICE**

This Memorandum of Understanding (MOU) is made this \_\_\_\_\_ day of \_\_\_\_\_, 2005, by and between the Maryland Institute for Emergency Medical Services Systems (MIEMSS), the Department of State Police and the **commercial air ambulance service**.

#### WITNESSETH:

WHEREAS, Education Article<sup>45</sup> Section 13-510 provides, among other things, that the Maryland Institute for Emergency Medical Services Systems is to coordinate a statewide system of emergency medical services as well as the planning and operation of emergency medical services with the federal, state and county governments, and

WHEREAS, Education Article Section 13-515 authorizes the Maryland Institute for Emergency Medical Services Systems to oversee commercial air ambulance services within Maryland, and

WHEREAS, Public Safety Article Section 2-301 (a) provides, among other things, that the Department of State Police is to safeguard the lives and safety of all persons in the State which includes, in part, providing air ambulance transport from the scene of a public safety incident, (scene Medevac), and

WHEREAS, **commercial ambulance service** is a licensed commercial air ambulance service under Maryland Education Article Section 13-515, and

WHEREAS, the Maryland Institute for Emergency Medical Services Systems has determined that, within the State of Maryland, greater coordination and centralized dispatching should occur, to enhance patient care as well as the safety of its emergency medical personnel, by establishing a centralized dispatch for scene Medevac services through the Systems Communication Center (SYSCOM) operated by MIEMSS, and

---

<sup>45</sup> All statutory references are to the Annotated Code of Maryland.



WHEREAS, the parties to this MOU acknowledge that the Department of State Police acts, and will continue to act, as the primary responder for scene Medevac services in Maryland, and,

WHEREAS, **commercial air services** desires to provide scene Medevac services in Maryland in a back-up capacity to the Department of State Police, and the Maryland Institute for Emergency Medical Services Systems desires that **commercial air ambulance service** provide such services under the terms of this Memorandum of Understanding, and

WHEREAS, the parties desire to set forth in writing the understanding reached between them,

NOW THEREFORE, in consideration of the mutual rights and obligations herein, the **commercial ambulance service**, the Department of State Police, and the Maryland Institute for Emergency Medical Services Systems agree to the following:

1. Department of State Police personnel at SYSCOM will request the use of **commercial air ambulance service** utilizing protocols approved by the State Emergency Medical Services Board (the "Board"). The Board will take into consideration the Position Paper on Guidelines for Air Medical Dispatch developed by the National Association of EMS Physicians in developing the protocols.
2. All dispatching of scene Medevacs in the State of Maryland will be through SYSCOM and **commercial air ambulance service** shall provide scene Medevac services in Maryland only when dispatched by SYSCOM.
3. The **commercial air ambulance service** will respond to scene Medevac requests from SYSCOM within the State of Maryland, subject to the availability of the manpower and resources of the **commercial ambulance service**, and weather.
4. When operating in the State of Maryland **commercial air ambulance service** will maintain radio communications with SYSCOM for the purposes of enhanced aircraft safety and relaying patient information, if applicable, to the appropriate medical facility and in accordance with COMAR 30.09.13.05(C)(2).
5. Personnel, equipment, patient care, data production, and quality review and assurance for any transport conducted under this MOU shall be in accordance with Education Article Section 13-515 and COMAR 30.09.
6. MIEMSS shall appoint a medical review committee under Health Occupations Article §1-401 to assess and improve the quality of care provided under this MOU, comprised of representatives of the Department of State Police and **commercial air ambulance service**, together with any other air ambulance service providing scene Medevac services under a Memorandum of Understanding and any other parties deemed appropriate by MIEMSS and /or the EMS Board. The medical review committee shall provide regular reports to the EMS Board. **Commercial air ambulance service** agrees to be a member

of and participate in reviews by the medical review committee. The committee shall meet at least quarterly to identify and address issues arising under this Memorandum of Understanding. The committee shall review issues concerning scene Medevac transports including but not limited to response times, patient acuity, patient outcomes, training issues and protocol variations.

7. This MOU shall be effective for a period of one year after which time it may be renewed.
8. Either party hereto may terminate this MOU for any reason upon thirty (30) days written notice to the other party.
9. The cost of furnishing services described herein shall be borne by the party furnishing such service and no claims for reimbursement shall be made to any party to this MOU, the State of Maryland, a local jurisdiction, a municipality or a volunteer fire company.
10. **Commercial air ambulance service** is an independent contractor, and shall not be deemed under any circumstances to be an employee or agent of the State of Maryland or any of its agencies, a local jurisdiction, a municipality or a volunteer fire company or to be working on behalf of the State of Maryland, a local jurisdiction, a municipality or a volunteer fire company.
11. By entering into this MOU, neither the State of Maryland nor its agencies waive sovereign immunity or any other immunity or defense from suit.
12. This MOU is nonexclusive and MIEMSS and the Department of State Police may enter into MOUs for back-up scene medevac transport with other licensed commercial air ambulance services or public safety entities.

IN WITNESS WHEREOF: the parties hereto have executed this MOU.

**Commercial Air Ambulance Service**

By: \_\_\_\_\_  
Date: \_\_\_\_\_

**The Maryland Institute for Emergency Medical Services Systems**

By: \_\_\_\_\_  
Date: \_\_\_\_\_  
Robert R. Bass, M.D.  
Executive Director, Maryland Institute for  
Emergency Medical Services Systems

**The Department of State Police**

By:\_\_\_\_\_

Date:\_\_\_\_\_

Colonel Thomas E. Hutchins

Superintendent, Department of State Police

# **Appendix B**

## **Air Ambulance Survey**

## **Maryland Air Ambulance Cost Survey**

***Stephen J. Salamon***  
***Chairman***

***Rex W. Cowdry, M.D.***  
***Executive Director***

Revised September 21, 2006

## Instructions

Senate Bill 770 directs the Maryland Health Care Commission (MHCC) to study the costs and payments for inter-hospital and accident scene transport by commercial air ambulance services. The legislation also directs MHCC to examine the feasibility of State regulation of financial aspects of air ambulance services.

The MHCC has determined that a limited amount of cost and revenue information is needed from the major air ambulance companies that operate in the State of Maryland. Please provide information specific to your Maryland book of business, if possible. Maryland-specific information is needed as the General Assembly will wish to consider the impact on State before taking action. We recognize that deriving Maryland-specific experience could be the most challenging element of the survey. We are providing some flexibility in defining Maryland based service. Some companies will report by whether a flight originates or lands at a Maryland hospital, others will report by revenue center such as helicopter or helicopter landing site.

The MHCC recognizes that some of the information requested is highly proprietary. Attached is an opinion of Jane Pilliod, Assistant Attorney General, that information submitted in the survey will be deemed proprietary and thus not discoverable under the Maryland Public Information Act.

The information is needed as soon as possible. We would like this information returned by October 16, 2006.

Please return this survey to  
Ms. Valerie Wooding  
[Vwooding@mhcc.state.md.us](mailto:Vwooding@mhcc.state.md.us)

For questions please contact  
Ben Steffen  
410-764-3573

## Survey Glossary

|                                      |   |
|--------------------------------------|---|
| Primary Source of Payment            | The insurance carrier to whom the claim is first submitted.   |
| Total Billable Flight Hours          | Flight miles that are billable, if round trip is billable please include, if one-way include only that distance.  |
| Totaled Billed                       | The charge for the flight including the fixed charge (A0431) and the miles (A0436).   |
| Total Payment from the Primary Payer | The amount received from the primary payer. This would typically be the allowed amount less co-payments from the patient.   |
| Amount Collected from Payment        | Report actual patient payments received not the amount owed.  |
| Total Amount Written-off             | Difference between what is billed and what is collected from all sources including primary and secondary payers and the patient.  |
| Fully Loaded Costs                   | Total costs for transport per HCPCS (A0461, A0436). The cost reported should include all aviation and EMS, nursing labor costs, helicopter operation and equipment costs, liability expense, and general administrative expenses. |
| Billed Charge                        | The amount billed per HCPCS.  |
| Payer Contracting Rate               | The average rate paid by the carrier per HCPCS code (A0431, A0436) when the air ambulance company has a contract with the insurance carrier or HMO.   |
| Payer Non-Contracting rate           | The average rate paid by the carrier per HCPCS (A0431, A0436) when the air ambulance company does not have a contract with the carrier or HMO and can balance bill the patient.   |

Air Ambulance

Company \_\_\_\_\_

Name of Respondent: \_\_\_\_\_ Telephone: \_\_\_\_\_

Number of Helicopter Bases serving Maryland: \_\_\_\_\_

Number of Helicopters: \_\_\_\_\_

Please describe how you define your Maryland business for this report.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(please refer to definitions on the preceding page in completing the answers.)

**Table B-1: Distribution of Air Inter-hospital Ambulance Trips 2005**

| Primary Source of Payment  | Number of Trips | Total Billable Flight Miles | Total Billed | Total Payment from Primary Payer | Amount Collected from Patient | Amount Written-off /Contractual allowance |
|--|-----------------|-----------------------------|--------------|----------------------------------|-------------------------------|---|
| Third-Party Health Insurers (Private Carriers, Medicare, Medicaid)           |                 |                             |              |                                  |                               |   |
| Other (Auto Insurance, VA, CHAMPUS)  |                 |                             |              |                                  |                               |   |
| Self-Party   |                 |                             |              |                                  |                               |   |
| Charity Care (No Payment Expected) and Uncollectible                         |                 |                             |              |                                  |                               |   |
| <b>TOTAL</b>   |                 |                             |              |                                  |                               |   |
| Note: Total uncompensated care is the sum of uncollectible and charity care. |                 |                             |              |                                  |                               |   |

**Table B-2: Fully Loaded Cost per Billing Code for 2005**

|                | Loaded Costs | Billed Charge |
|----------------|--------------|---------------|
| A0431          |              |               |
| A0436 per mile |              |               |



Table B-3: Charity Care, Uncollectibles, and Complaints

| Trips   | 2004 | 2005 |
|---|------|------|
| Trips Provided on a Charity Care Basis, no expected payment |      |      |
| Miles Provided on a Charity Care Basis, no expected payment |      |      |
|   |      |      |
| Total Trips Written off as Not Collectible                  |      |      |
| Total Miles Written off as Uncollectible                    |      |      |
| Total Trips Referred to Collections                         |      |      |
|   |      |      |
| Total Trips Reimbursed via Deferred Payment                 |      |      |
| Total Miles Reimbursed via Deferred Payment                 |      |      |
| Total Patient Complaints                                    |      |      |

Do you contract with any of the following private insurance carriers in Maryland?

Yes

Aetna

\_\_\_\_\_

Carefirst

\_\_\_\_\_

CIGNA

\_\_\_\_\_

Coventry

\_\_\_\_\_

Kaiser of the Mid-Atlantic

\_\_\_\_\_

MAMSI/UnitedHealthCare

\_\_\_\_\_

UnitedHealthCare (non MAMSI)

\_\_\_\_\_

Guardian

\_\_\_\_\_

Unicare/Anthem

\_\_\_\_\_

Other Maryland carriers \_\_\_\_\_

Do you maintain single case agreements with Payers?

\_\_\_\_\_

Please provide the following information.

1. A copy of your billing and collection policy.
2. A copy of charity care policy.

# Appendix C

## Air Ambulance Companies Billing Maryland Privately Insured Patients in 2005

| Company  |
|--|
| Lifestar Response of Maryland                  |
| New England Life Flight, Inc.                  |
| Center For Emergency Medicine (STAT MedEvac)   |
| North Flight Grand Traverse Ambulance Services |
| Airheart 1                                     |
| Arch Air Medical Service                       |
| Med-Trans Corp.                                |
| Sky Flightcare                                 |
| Midatlantic Transport Company                  |
| Children's Hospital                            |
| Inova Healthcare Services                      |
| Carilion Patient Transportation                |
| Healthnet Aeromedical Service                  |
| Memorial Mission Hospital                      |
| MedSTAR Transport                              |
| Bayflite Medical Transport                     |
| Orange County Fire Rescue Division             |
| Petroleum Helicopters, Inc. (PHI)              |
| Life Air Rescue                                |
| Air Evac Services                              |
| Omni Transport Sys. Ambulance Services         |
| Native American Air Ambulance Services         |
| Rocky Mountain Holdings, LLC                   |
| Ancillary Care Management, Inc.                |

# **Appendix D**

## **Senate Bill 770 — Air Ambulance Study**

**ENROLLED BILL***-- Finance/Health and Government Operations --*Introduced by **Senator Hafer**

Read and Examined by Proofreaders:

\_\_\_\_\_  
Proofreader.\_\_\_\_\_  
Proofreader.Sealed with the Great Seal and presented to the Governor, for his approval this  
\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_ o'clock, \_\_\_\_ M.\_\_\_\_\_  
President.

CHAPTER \_\_\_\_\_

1 AN ACT concerning

2 **~~Health Insurance – Nonemergency Helicopter Transportation – Balance~~**  
 3 **~~Billing Prohibited~~**  
 4 **Air Ambulance Services - Study**

5 ~~FOR the purpose of prohibiting a provider of nonemergency helicopter transportation~~  
 6 ~~from billing or seeking reimbursement from an insured for an amount in excess~~  
 7 ~~of the amount paid by a certain insurer, nonprofit health service plan, or health~~  
 8 ~~maintenance organization under certain circumstances; and generally relating~~  
 9 ~~to balance billing for nonemergency helicopter transportation under health~~  
 10 ~~insurance.~~

11 FOR the purpose of requiring the Maryland Health Care Commission, in conjunction  
 12 with the Health Services Cost Review Commission and the Maryland Institute  
 13 for Emergency Medical Services Systems and with the assistance of the Office of  
 14 the Attorney General, to conduct a certain study and submit a certain report to  
 15 the Governor and certain committees of the General Assembly on or before a  
 16 certain date; and generally relating to a study of air ambulance services.

1 ~~BY adding to~~  
2 ~~Article Health General~~  
3 ~~Section 19-706(hhh)~~  
4 ~~Annotated Code of Maryland~~  
5 ~~(2005 Replacement Volume and 2005 Supplement)~~

6 ~~BY adding to~~  
7 ~~Article Insurance~~  
8 ~~Section 15-132~~  
9 ~~Annotated Code of Maryland~~  
10 ~~(2002 Replacement Volume and 2005 Supplement)~~

11 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF  
12 MARYLAND, That ~~the Laws of Maryland read as follows:~~

13 ~~Article Health General~~

14 ~~19-706.~~

15 ~~(HHH) THE PROVISIONS OF § 15-132 OF THE INSURANCE ARTICLE APPLY TO~~  
16 ~~HEALTH MAINTENANCE ORGANIZATIONS.~~

17 ~~Article Insurance~~

18 ~~15-132.~~

19 ~~(A) THIS SECTION APPLIES TO:~~

20 ~~(1) INSURERS AND NONPROFIT HEALTH SERVICE PLANS THAT PROVIDE~~  
21 ~~HOSPITAL, MEDICAL, OR SURGICAL BENEFITS TO INDIVIDUALS OR GROUPS UNDER~~  
22 ~~HEALTH INSURANCE POLICIES THAT ARE ISSUED OR DELIVERED IN THE STATE; AND~~

23 ~~(2) HEALTH MAINTENANCE ORGANIZATIONS THAT PROVIDE HOSPITAL,~~  
24 ~~MEDICAL, OR SURGICAL BENEFITS TO INDIVIDUALS OR GROUPS UNDER CONTRACTS~~  
25 ~~THAT ARE ISSUED OR DELIVERED IN THE STATE.~~

26 ~~(B) IF AN INSURED INDIVIDUAL IS TRANSPORTED BETWEEN HOSPITALS BY~~  
27 ~~HELICOPTER IN ORDER TO RECEIVE COVERED SERVICES THAT ARE NOT IN~~  
28 ~~RESPONSE TO AN EMERGENCY MEDICAL CONDITION, THE HELICOPTER~~  
29 ~~TRANSPORTATION PROVIDER MAY NOT BILL OR SEEK REIMBURSEMENT FROM THE~~  
30 ~~INSURED FOR ANY AMOUNT IN EXCESS OF THE AMOUNT PAID BY THE ENTITY~~  
31 ~~SUBJECT TO THIS SECTION FOR THE HELICOPTER TRANSPORTATION REGARDLESS~~  
32 ~~OF WHETHER THE PROVIDER IS UNDER CONTRACT WITH THE ENTITY SUBJECT TO~~  
33 ~~THIS SECTION~~

34 ~~(a) The Maryland Health Care Commission, in conjunction with the Health~~  
35 ~~Services Cost Review Commission and the Maryland Institute for Emergency Medical~~

1 Services Systems, and with the assistance of the Office of the Attorney General, shall  
2 study:

3           (1)       the financial aspects of inter-hospital patient transfer *and scene*  
4 transport by air ambulance services operating in Maryland, including:

5                   (i)       the types and costs of operations;

6                   (ii)      charges for services provided, including billing practices; and

7                   (iii)     reimbursement by payors;

8           (2)       state and federal laws applicable to the operation of air ambulance  
9 services in the State; and

10           (3)       mechanisms available to the State to regulate financial aspects of air  
11 ambulance services and to ensure cost-effective use of air ambulance services for  
12 inter-hospital patient transfer *and scene transport*.

13       (b)       On or before December 1, 2006, the Maryland Health Care Commission,  
14 the Health Services Cost Review Commission, and the Maryland Institute for  
15 Emergency Medical Services Systems shall submit a report on the study and any  
16 findings and recommendations to the Governor and, in accordance with § 2-1246 of  
17 the State Government Article, to the Senate Finance Committee and the House  
18 Health and Government Operations Committee.

19       SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect  
20 ~~October~~ July 1, 2006.



STATE OF MARYLAND



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Baltimore, Maryland 21215

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